

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration,
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service
and World Agricultural Outlook Board

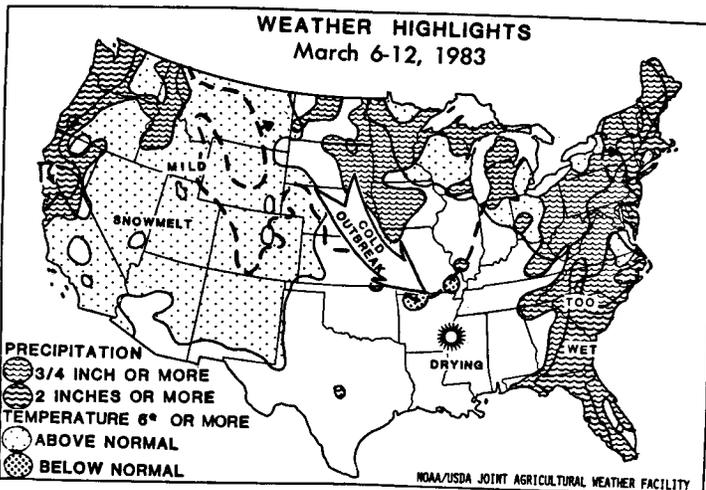
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Mar. 15, 1983

National Weather Summary

March 6 to 12



western Minnesota. Light rain continued eastward to New England and from eastern Kansas eastward. Heavy thunderstorms fell over most of Florida and were scattered from northern Alabama to the Ohio Valley, and from northern Georgia to the mid-Atlantic coast. Rain extended northward along the coast. Light showers covered the Western States with heavier amounts along the Washington and Oregon coasts. Record-warm temperatures were recorded in much of the East.

TUESDAY ... Light snow fell from the northern Plains to the northern Mississippi Valley, and a front ahead of the cold air triggered showers over the Great Lakes and to the east coast, through the upper Ohio Valley, and through the Appalachians. Showers, thunderstorms, and heavy drizzle reached from South Carolina to southern New England. A few thunderstorms broke out in southeastern Texas late in the day. Much of the West was clearing, but heavy rain on the Washington and Oregon coasts became light as it moved eastward to the northern Rockies.

WEDNESDAY ... The cold air spread eastward through the Great Lakes and southward through the central Plains. Light snow fell from Missouri to Wisconsin and through Indiana to the eastern Great Lakes. Light rain and drizzle fell through the Ohio and Tennessee Valleys, to the east coast of North Carolina, and to the Northeast. By the end of the day, the drizzle turned to snow through the Ohio and Tennessee Valleys. In the Northwest, showers reached through Washington and Oregon to northern California.

THURSDAY ... Gusty winds continued to usher cold Canadian air into the central United States. Early-morning freezing temperatures reached southward into the lower Mississippi Valley and northern Alabama. Light snow fell from the upper Great Lakes through the middle Mississippi Valley, the Ohio Valley, and the Tennessee Valley into central Alabama and Georgia

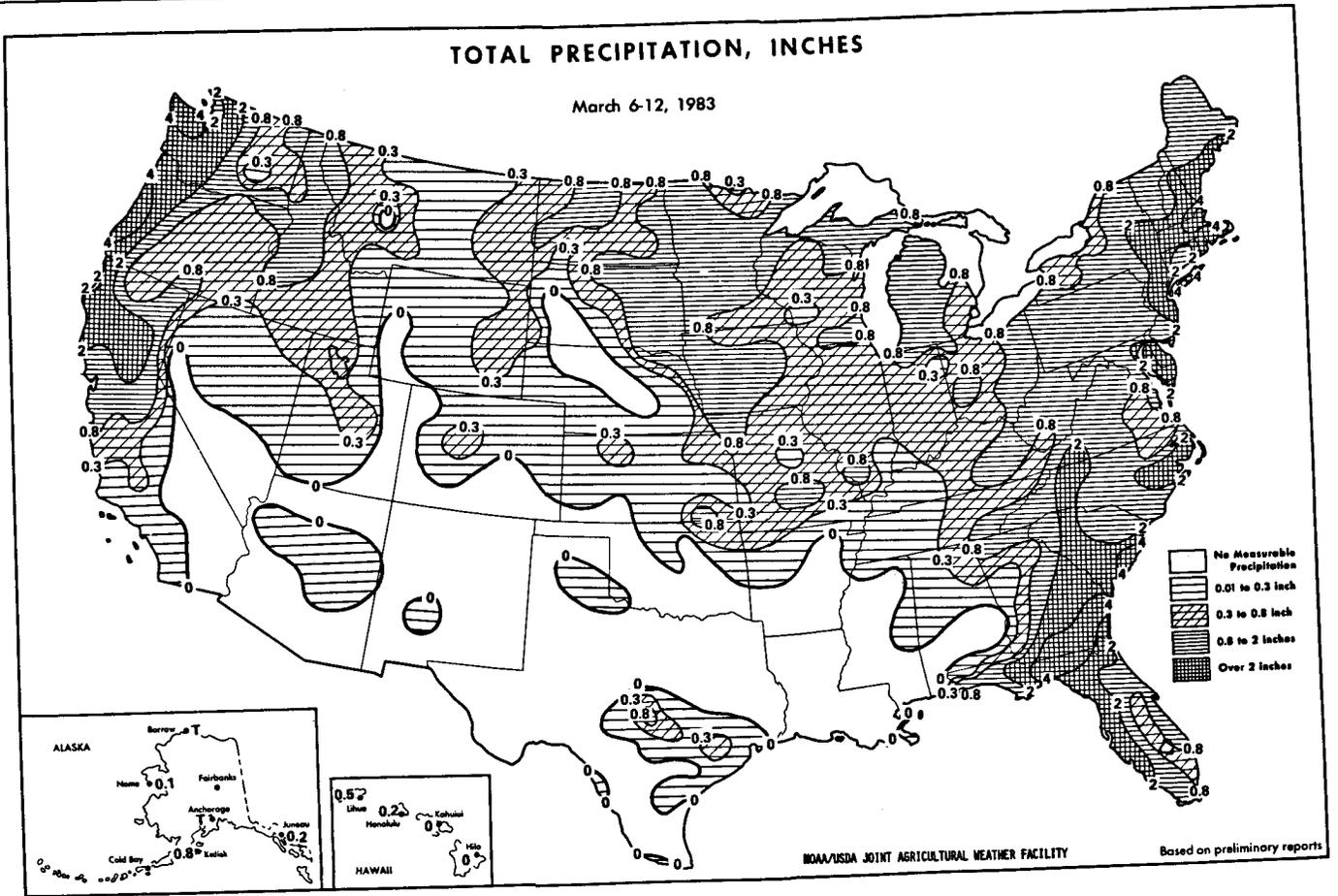
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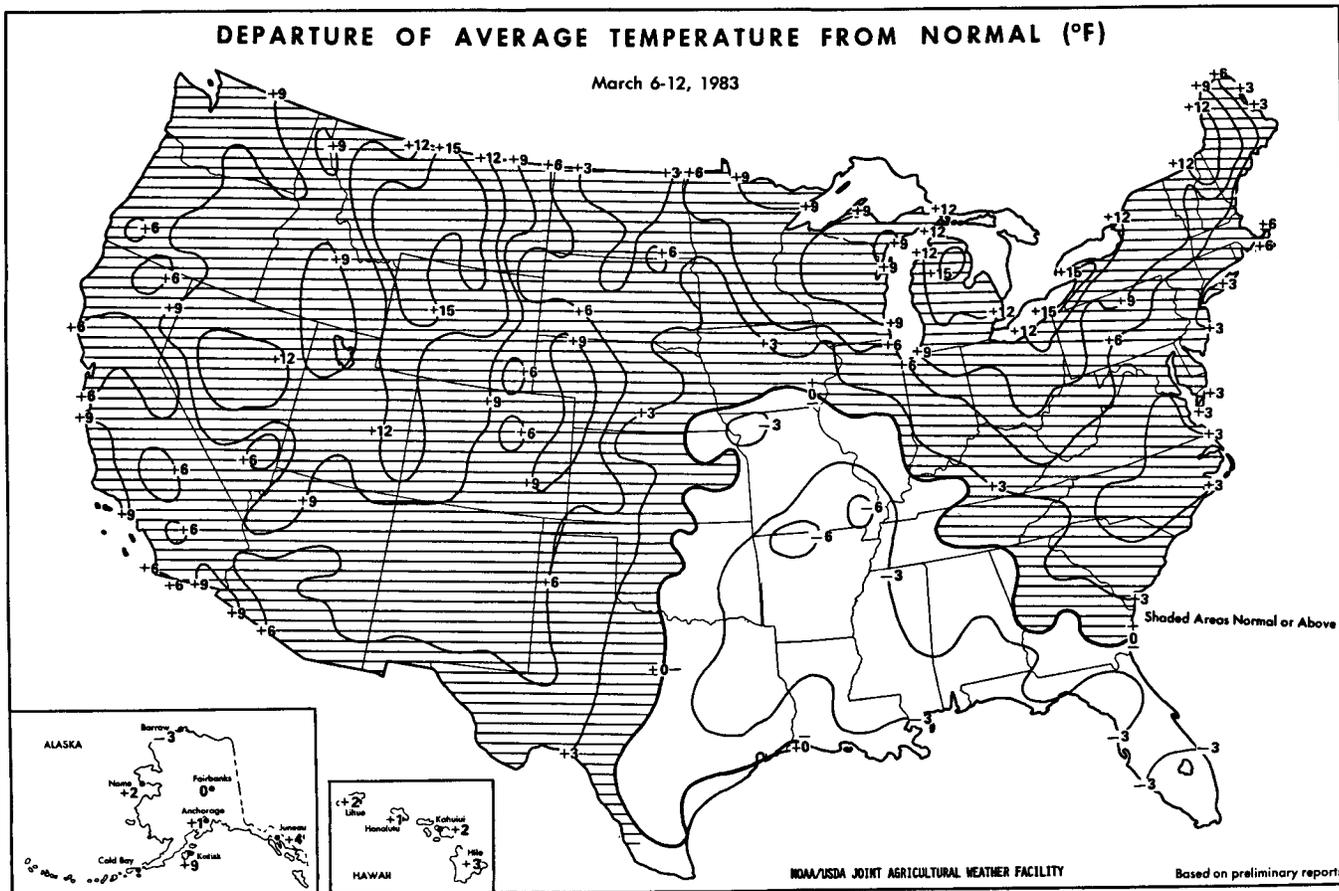
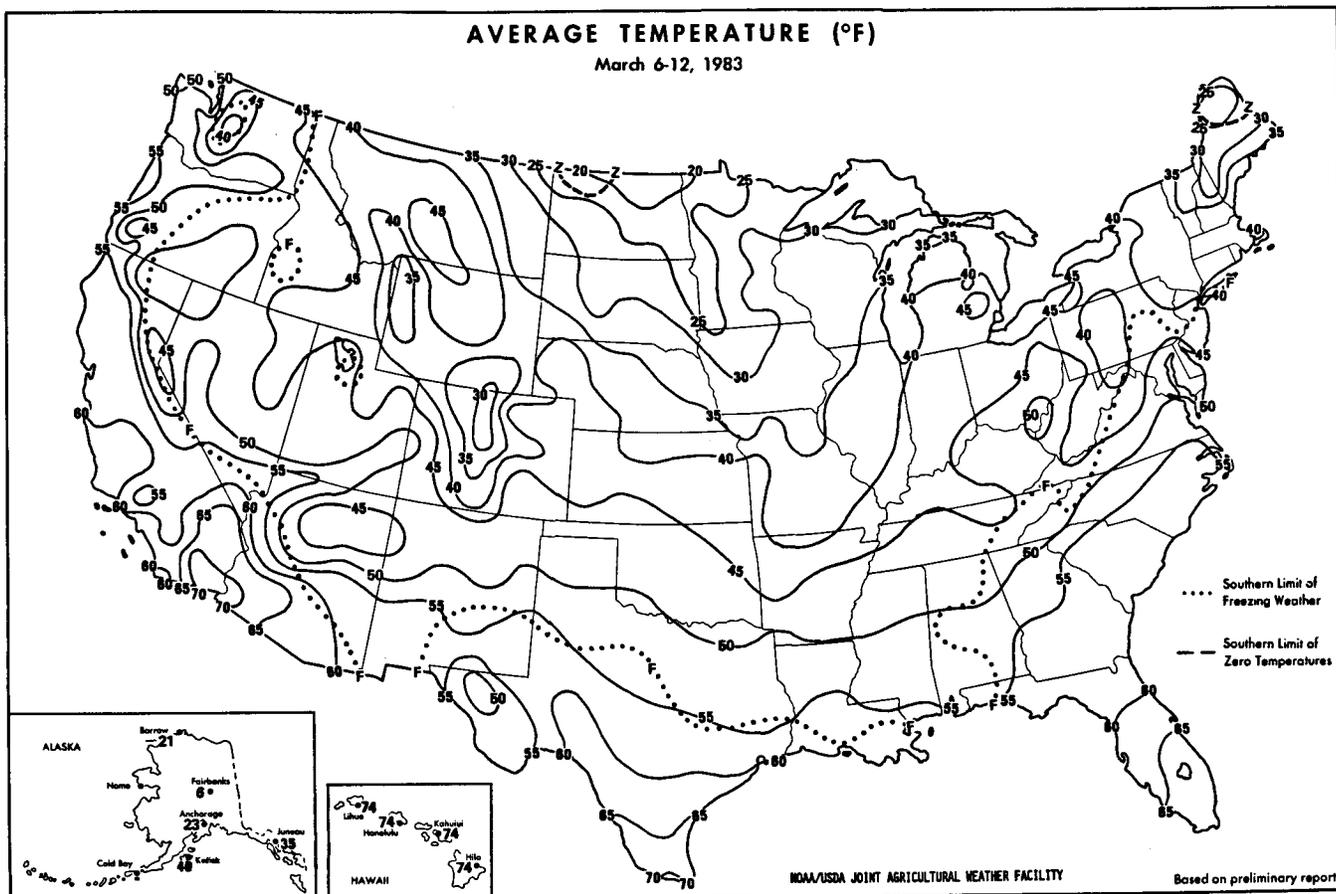
HIGHLIGHTS: A cold outbreak early in the week moved slowly southward and eastward until it covered the entire area from the Plains eastward. Warm, moist air ahead of the cold front triggered moderate to heavy rain from Missouri to Minnesota and the eastern Dakotas, and light rain and drizzle fell eastward to the Atlantic coast. Snow fell along and behind the cold front, covering the northern Plains, the Great Lakes region, the Ohio Valley, and even northern Alabama and Georgia. Finally, snow fell over the Appalachians and the Northeast except for the coast. Early in the week, heavy thunderstorms moved over northern Florida and up the east coast to North Carolina. Only light rain fell in the Northwest early in the week, but as the week ended, a new Pacific storm ushered in heavy rain and high winds to the west coast as far south as central California. Heavy snow fell in the Sierras. It was warmer than normal from the High Plains to the west coast, across the Great Lakes, and along most of the east coast. Average temperatures were cooler than normal in the eastern portion of the central and southern Plains and the lower Mississippi Valley.

SUNDAY ... Snow tapered off in the central Rockies, but heavy snow fell in eastern Montana and the western Dakotas and Nebraska. A cold outbreak started pushing into the Rockies and edging into the northern Plains. To the east of the cold air, moderate to heavy rain fell from Missouri to Minnesota, and light to moderate rain fell eastward to the Atlantic coast. Heavy thunderstorms hit northern Florida and along the east coast, through North Carolina to eastern Kentucky. Light scattered showers fell along the west coast with some heavy snow in the mountains.

MONDAY ... The cold air moved further into the Plains, and high winds and snow fell through the Dakotas. Heavy snow accumulated in the eastern Dakotas and

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Weather Data for the Week Ending Mar. 12, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 26	PCT. NORMAL SINCE Feb. 26	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE °F		PRECIPITATION		
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE	
AL BIRMINGHAM	58	40	79	30	49	-2	.2	-1.3	.1	3.3	114	14.5	114	89	39	0	3	3	0	0
MOBILE	66	41	81	30	53	-4	0	-1.6	0	5.2	168	20.1	162	86	31	0	3	0	0	0
MONTGOMERY	62	42	81	34	52	-2	T	-1.4	T	3.5	130	16.3	147	80	40	0	0	0	0	0
AK ANCHORAGE	32	14	39	6	23	1	T	-1.1	T	0	0	.5	24	88	52	0	7	0	0	0
BARROW	-17	-25	-2	-31	-21	-3	T	0	T	0	0	.1	14	79	62	0	7	1	0	0
FAIRBANKS	18	-6	27	-13	6	0	.1	-1.1	T	.1	33	.5	38	57	38	0	7	2	0	0
JUNEAU	43	26	48	16	35	4	.2	-1.6	.2	.3	18	5.6	63	86	53	0	5	3	0	0
KODIAK	44	35	49	30	40	9	.8	-1.2	.6	1.5	71	18.2	156	85	59	0	2	3	1	0
NOME	16	-1	33	-18	8	2	.1	-1.2	.1	.2	33	.4	17	65	45	0	7	1	0	0
AZ PHOENIX	77	54	84	47	66	7	0	-1.2	0	2.4	600	4.3	239	85	35	0	0	0	0	0
PRESCOTT	61	36	67	33	48	5	T	-1.3	T	1.1	183	2.6	76	95	43	0	0	1	0	0
TUCSON	74	49	83	43	62	5	0	-1.1	0	.7	233	3.4	189	76	28	0	0	0	0	0
YUMA	83	58	90	56	71	8	0	-1.1	0	.2	200	1.0	143	58	23	1	0	0	0	0
AR FORT SMITH	55	32	66	23	44	-4	.1	-1.7	.1	1.1	69	4.2	61	86	40	0	4	1	0	0
LITTLE ROCK	55	36	72	26	46	-4	T	-1.1	T	2.2	100	6.1	59	74	44	0	4	0	0	0
CA BAKERSFIELD	69	51	73	48	60	4	.3	-1.1	.3	.7	175	4.0	190	99	54	0	0	1	0	0
EUREKA	63	51	71	46	57	9	1.8	-1.6	1.1	2.7	113	19.7	135	85	58	0	0	6	1	0
FRESNO	69	51	72	48	60	7	.2	-1.1	.2	2.0	286	10.1	246	95	56	0	0	3	0	0
LOS ANGELES	66	55	70	53	61	5	T	-1.4	T	5.0	556	14.8	255	91	67	0	0	1	0	0
RED BLUFF	63	52	69	50	58	6	2.2	-1.6	.8	7.9	608	20.8	242	93	65	0	0	5	2	0
SACRAMENTO	64	50	69	41	57	5	1.7	-1.1	1.1	4.0	333	12.2	167	96	66	0	0	4	2	0
SAN DIEGO	69	59	73	56	64	6	.1	-1.2	.1	4.1	586	9.4	235	89	64	0	0	1	0	0
SAN FRANCISCO	61	51	66	45	56	3	1.0	-1.4	.6	4.2	323	16.6	198	88	64	0	0	4	1	0
CO DENVER	50	28	63	24	39	4	.1	-1.1	.1	3.0	600	3.2	213	84	38	0	6	2	0	0
GRAND JUNCTION	62	38	70	33	50	11	0	-1.1	0	.2	67	1.4	88	85	31	0	0	0	0	0
PUEBLO	61	29	70	22	45	7	T	-1.1	T	.5	100	1.1	100	87	25	0	5	0	0	0
CT BRIDGEPORT	43	35	46	31	39	3	1.1	-1.4	.6	1.8	120	6.9	100	97	82	0	1	5	1	0
HARTFORD	42	33	49	25	37	4	2.0	-1.1	.9	2.7	159	11.3	141	83	66	0	2	6	1	0
DC WASHINGTON	52	42	62	38	47	4	1.3	-1.5	.5	1.9	127	6.9	105	87	69	0	0	5	1	0
FL APALACHICOLA	65	49	79	35	57	-2	1.1	0	.8	1.9	90	11.0	129	87	53	0	0	3	1	0
DAYTONA BEACH	71	50	84	37	61	-2	1.5	.7	1.5	1.7	106	10.2	157	84	44	0	0	2	1	0
JACKSONVILLE	69	48	82	35	58	-1	2.5	-1.6	2.0	2.7	150	14.1	181	90	48	0	0	2	1	0
KEY WEST	74	65	81	59	70	-4	1.6	-1.2	.9	1.7	213	22.8	543	78	59	0	0	2	2	0
MIAMI	74	58	83	44	66	-4	.3	-1.1	.1	3.1	388	13.8	288	89	51	0	0	3	0	0
ORLANDO	72	53	87	39	63	-2	.8	0	.8	1.4	88	11.3	169	90	45	0	0	1	1	0
TALLAHASSEE	67	48	81	35	58	-1	5.5	-4.1	4.7	7.2	257	17.1	155	88	45	0	0	2	2	0
TAMPA	70	56	86	45	63	-2	2.3	-1.4	2.2	2.8	156	10.9	163	92	59	0	0	2	1	0
WEST PALM BEACH	72	57	78	42	64	-4	.8	-1.1	.4	3.1	221	20.4	324	82	53	0	0	2	0	0
CA ATLANTA	59	42	77	31	51	1	T	-1.3	T	2.2	88	9.9	91	90	39	0	2	1	0	0
AUGUSTA	67	48	80	36	57	5	2.7	-1.6	2.7	3.6	171	13.3	149	82	42	0	0	1	1	0
MACON	66	48	82	35	57	2	1.1	-1.1	1.1	3.1	129	15.7	152	90	46	0	0	1	1	0
SAVANNAH	68	51	79	39	59	3	3.8	-2.8	2.8	4.2	221	14.9	199	79	46	0	0	2	2	0
HI HILO	85	64	87	60	74	3	0	-3.2	0	.1	2	1.7	6	82	43	0	0	0	0	0
HONOLULU	83	65	84	63	74	1	.2	-1.6	.2	.2	13	.5	6	92	59	0	0	2	0	0
KAHULUI	84	63	86	59	74	2	0	-1.7	0	0	0	.6	8	89	52	0	0	0	0	0
LIHUE	81	66	85	64	74	2	.5	-1.6	.4	.5	24	1.3	11	91	57	0	0	3	0	0
ID BOISE	57	41	66	36	49	9	.9	-1.7	.6	1.3	260	4.2	135	86	50	0	0	3	1	0
LEWISTON	56	43	63	35	49	8	.5	-1.3	.4	.9	225	3.1	129	89	58	0	0	6	0	0
POCATELLO	55	34	64	32	45	11	.3	-1.1	.2	.3	75	1.9	86	87	44	0	3	2	0	0
IL CHICAGO	46	30	70	18	38	5	.5	0	.5	1.0	100	3.0	79	82	63	0	5	3	1	0
MOLINE	41	30	64	21	35	3	.6	-1.1	.5	.7	70	2.2	52	90	69	0	5	4	0	0
PEORIA	42	31	64	23	37	2	.3	-1.2	.2	.7	70	2.2	52	90	69	0	5	3	0	0
QUINCY	39	31	56	22	35	-1	.4	-1.2	.3	1.4	127	2.3	73	92	62	0	5	3	1	0
ROCKFORD	43	28	70	15	36	5	.6	-1.1	.5	.7	78	2.9	73	92	62	0	5	5	0	0
SPRINGFIELD	41	32	64	22	36	0	.4	-1.1	.2	1.1	110	2.5	57	90	71	0	5	3	0	0
IN EVANSVILLE	49	38	72	29	44	2	.1	-1.9	.1	2.2	110	4.8	56	82	52	0	3	3	0	0
FORT WAYNE	51	36	72	25	44	10	.3	-1.4	.1	.3	23	2.0	35	87	57	0	4	4	0	0
INDIANAPOLIS	48	36	70	27	42	5	.6	-1.2	.5	.8	82	2.8	42	94	68	0	4	4	1	0
SOUTH BEND	48	36	70	25	42	10	.9	-1.3	.5	.9	82	2.6	48	91	65	0	4	5	0	0
IA DES MOINES	39	27	60	19	33	2	1.0	-1.5	1.0	1.2	133	4.5	145	79	58	0	6	4	1	0
SIoux CITY	39	23	55	15	31	1	1.7	-1.4	1.7	2.4	400	3.5	175	81	58	0	6	1	1	0
WATERLOO	37	28	58	21	33	5	1.0	-1.6	1.0	1.4	175	3.6	138	88	69	0	6	2	1	0
KS CONCORDIA	48	27	64	15	37	1	T	-1.3	T	1.3	260	4.1	128	76	41	0	6	1	0	0
DODGE CITY	59	32	78	22	45	6	T	-1.2	T	0	0	1.9	127	64	29	0	4	0	0	0
GOODLAND	57	29	70	23	43	9	T	-1.2	T	.4	100	1.5	125	83	37	0	5	1	0	0
TOPEKA	49	31	66	23	40	2	.2	-1.2	.2	2.3	329	3.6	138	71	46	0	5	1	0	0
WICHITA	51	30	64	20	40	-1	.1	-1.2	.1	1.1	183	4.2	183	84	49	0	5	1	0	0
KY BOWLING GREEN	49	37	74	26	43	-3	.3	-1.9	.1	1.0	42	5.4	45	96	70	0	4	3	0	0
LEXINGTON	53	39	76	30	46	5	.4	-1.7	.3	.5	24	3.3	36	87	53	0	4	3	0	0
LOUISVILLE	52	39	75	28	46	4	.5	-1.6	.5	.6	29	3.6	41	87	54	0	3	3	0	0
LA ALEXANDRIA	67	43	82	33	55	-3	0	-1.2	0	1.5	63	12.4	106	68	29	0	0	0	0	0
BATON ROUGE	68	43	83	31	55	-3	0	-1.2	0	1.4	58	11.6	104	80	29	0	2	0	0	0
LAKE CHARLES	69	44	81	33	57	-2	T	-1.9	T	.6	32	11.0	108	84	34	0	0	0	0	0
NEW ORLEANS	68	45	81	35	57	-2	0	-1.3	0	.7	27	16.4	140	79	33	0	0	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Mar. 12, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS						
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 26	PCT. NORMAL SINCE Feb. 26	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERA- TURE °F		PRECIPI- TATION			
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
ME SHREVEPORT	67	38	79	30	52	-2	0	.9	0	1.3	72	12.3	135	86	29	0	3	0	0		
ME CARIBOU	36	16	45	-3	26	5	1.2	.7	1.2	2.1	210	6.7	129	81	46	0	7	2	1		
ME PORTLAND	40	30	50	20	35	6	2.8	2.0	1.3	4.2	263	12.7	157	92	64	0	5	5	1		
MD BALTIMORE	49	41	60	38	45	5	2.2	1.4	1.1	2.9	181	10.6	147	91	74	0	0	7	1		
MD SALISBURY	52	41	66	35	47	3	2.3	1.4	.6	3.2	178	8.3	99	100	84	0	0	5	2		
MA BOSTON	43	35	54	30	39	4	4.5	3.6	1.6	7.3	406	17.3	197	92	74	0	1	6	5		
MA CHATHAM	44	37	46	31	41	-1	6.0	-	1.9	8.3	-	17.6	-	97	86	0	1	6	5		
MI ALPENA	43	31	56	21	37	14	.8	.4	.4	1.0	125	3.8	97	98	71	0	3	4	0		
MI DETROIT	51	35	68	24	43	10	.4	-	.3	.4	40	2.0	44	85	59	0	3	3	0		
MI FLINT	57	36	100	25	46	17	.7	.3	.4	.8	100	2.8	65	88	61	1	3	3	0		
MI GRAND RAPIDS	50	34	68	21	42	12	.9	.4	.5	.9	100	3.5	81	85	59	0	4	5	0		
MI HOUGHTON LAKE	45	32	60	19	39	15	1.3	.9	.9	1.4	200	3.5	100	93	66	0	4	4	1		
MI LANSING	48	34	67	22	41	11	1.1	.6	.5	1.1	110	2.9	63	94	65	0	4	4	0		
MI MARQUETTE	37	21	47	3	29	10	1.7	1.3	.8	2.1	233	8.0	182	97	72	0	5	5	2		
MI MUSKOGON	47	35	67	23	41	11	.6	.1	.5	.6	60	2.9	59	90	68	0	4	4	0		
MI SAULT STE. MARIE	39	25	45	10	32	11	.7	.4	.3	1.3	186	4.6	110	96	69	0	4	5	0		
MN ALEXANDRIA	34	17	46	9	26	6	.8	.6	.4	1.3	325	2.4	150	90	67	0	6	3	0		
MN DULUTH	32	19	38	6	26	5	1.0	.7	.7	1.2	240	3.0	120	93	70	0	6	4	1		
MN INT'L FALLS	36	18	55	5	27	11	.3	.1	.1	.6	150	1.7	94	89	58	0	6	3	0		
MN MINNEAPOLIS	39	25	55	20	32	7	1.0	.6	1.0	1.4	200	3.2	160	92	67	0	6	3	1		
MN ROCHESTER	35	25	55	19	30	6	.5	.1	.3	.7	117	2.7	150	87	70	0	6	4	0		
MS GREENWOOD	57	41	80	29	49	-3	0	-	1.3	0	2.4	92	13.7	114	79	44	0	1	0	0	
MS JACKSON	63	39	82	27	51	-3	T	-	1.3	T	4.0	160	18.1	160	91	37	0	3	0	0	
MS MERIDIAN	63	40	80	31	52	-2	.1	-	1.3	.1	3.3	118	15.6	133	89	37	0	1	1	0	
MO CAPE GIRARDEAU	49	37	66	29	43	-1	.2	-	.6	.2	1.0	67	2.4	30	91	65	0	4	2	0	
MO COLUMBIA	41	32	57	25	37	-2	.3	-	.3	.2	1.0	91	1.8	43	89	69	0	5	4	0	
MO KANSAS CITY	45	30	64	23	37	-1	.4	-	.1	.4	1.1	122	2.3	70	82	54	0	5	1	0	
MO SAINT LOUIS	43	33	63	22	38	-3	.4	-	.2	.2	1.0	91	2.3	48	97	74	0	5	3	0	
MO SPRINGFIELD	46	32	61	24	39	-2	.5	-	.1	.4	1.0	83	2.3	46	80	55	0	5	3	0	
MT BILLINGS	57	31	72	20	44	14	.1	-	.1	.1	.1	25	.5	29	83	39	0	4	2	0	
MT GLASGOW	40	26	56	21	33	11	.2	.1	.1	.4	400	.6	60	85	64	0	6	2	0	0	
MT GREAT FALLS	52	30	69	23	41	13	.5	.2	.5	.6	120	1.0	50	82	47	0	4	1	0	0	
MT HAVRE	50	28	74	23	39	16	.3	.2	.3	.4	200	.8	67	95	51	0	5	1	0	0	
MT HELENA	58	31	70	22	44	16	T	-	.1	T	0	.4	40	84	35	0	5	0	0	0	
MT KALISPELL	48	31	61	26	40	11	.8	.5	.2	1.1	220	3.0	103	98	68	0	4	5	0	0	
MT MILES CITY	43	26	60	13	35	7	.7	.5	.7	.8	267	1.1	100	91	62	0	5	1	1	0	
MT MISSOULA	53	33	66	27	43	12	.5	.4	.4	.7	350	2.2	110	98	56	0	3	5	0	0	
NE GRAND ISLAND	46	25	60	14	36	3	T	-	.2	T	.9	225	1.9	127	79	40	0	6	0	0	0
NE LINCOLN	45	25	61	16	35	2	.2	-	.1	.2	1.2	200	2.7	142	83	46	0	6	1	0	0
NE NORFOLK	43	23	58	13	33	3	.3	0	.3	1.0	200	2.4	126	83	46	0	6	1	0	0	
NE NORTH PLATTE	53	25	72	17	39	7	T	-	.2	T	.8	200	1.4	108	83	34	0	6	1	0	0
NE OMAHA	40	23	54	14	31	0	1.2	.9	1.2	1.9	317	4.1	186	85	60	0	6	1	1	1	
NE SCOTTSBLUFF	55	27	68	18	41	9	.1	0	.1	.9	300	1.1	138	83	35	0	5	1	0	0	
NE VALENTINE	46	23	70	12	34	6	0	-	.1	0	.4	200	.7	64	75	39	0	6	0	0	0
NV ELY	56	29	61	27	43	11	.1	-	.1	.1	.7	175	3.1	194	89	38	0	7	1	0	0
NV LAS VEGAS	71	49	74	45	60	7	0	-	.1	0	.8	400	1.6	160	72	28	0	0	0	0	0
NV RENO	58	35	65	28	46	7	T	-	.2	T	.7	175	3.4	148	80	33	0	2	0	0	0
NV WINNEMUCCA	58	35	66	30	47	10	.1	-	.1	.7	175	2.6	124	81	36	0	3	1	0	0	
NH CONCORD	41	30	57	18	36	6	2.8	2.2	1.0	4.2	350	10.3	166	87	64	0	4	6	2	2	
NJ ATLANTIC CITY	49	40	61	33	44	6	1.8	.8	.6	2.9	145	7.9	90	99	80	0	0	7	1	1	0
NM ALBUQUERQUE	66	36	72	30	51	7	0	-	.1	0	.1	50	1.9	211	67	20	0	2	0	0	0
NM CLOVIS	66	38	75	32	52	8	T	-	.1	T	0	0	1.4	140	65	23	0	1	0	0	0
NM ROSWELL	69	42	72	33	55	8	T	-	.1	T	0	0	.6	75	49	22	0	0	0	0	0
NY ALBANY	44	34	52	31	39	9	2.5	1.9	1.2	2.8	233	8.5	160	96	70	0	2	6	2	2	0
NY BINGHAMTON	42	32	52	25	37	9	1.2	.6	.7	1.3	108	5.3	93	94	74	0	2	6	1	1	0
NY BUFFALO	52	38	76	26	45	16	.6	-	.3	.8	57	3.5	51	91	63	0	2	5	0	0	0
NY NEW YORK	42	36	45	34	39	1	2.7	1.8	.7	3.8	224	10.9	147	91	72	0	0	6	3	3	0
NY ROCHESTER	50	39	65	29	44	14	.8	.2	.4	.9	75	3.5	63	91	67	0	1	5	0	0	0
NY SYRACUSE	44	34	58	27	39	9	.6	-	.1	.3	.8	57	3.8	58	98	75	0	2	6	0	0
NC ASHEVILLE	55	38	73	30	47	3	1.7	.7	1.6	1.8	90	10.7	124	90	58	0	2	4	1	1	0
NC CHARLOTTE	62	47	74	35	55	6	1.4	.4	1.0	1.6	80	9.3	101	92	53	0	0	6	1	1	0
NC GREENSBORO	57	45	70	35	51	5	2.0	1.1	1.0	2.2	122	7.4	89	93	64	0	0	5	2	2	0
NC HATTERAS	59	49	69	38	54	5	3.2	2.3	1.9	4.5	237	21.1	211	97	71	0	0	5	2	2	0
NC NEW BERN	64	52	74	42	58	6	3.2	2.2	2.2	4.8	240	16.8	179	92	63	0	0	4	2	2	0
NC RALEIGH	60	46	70	35	53	6	1.7	.9	1.3	2.6	153	10.4	127	95	60	0	0	6	1	1	0
NC WILMINGTON	65	50	76	38	57	5	.8	-	.2	.8	1.3	121	14.5	175	93	54	0	0	1	1	1
ND BISMARCK	33	18	51	9	25	4	.6	.5	.4	2.7	850	2.2	169	94	71	0	6	2	0	0	0
ND FARGO	31	17	42	5	24	4	1.2	1.1	.6	2.1	1050	2.8	255	92	74	0	6	3	1	1	0
ND GRAND FORKS	31	18	40	9	25	6	1.1	1.0	.6	1.7	567	2.3	164	84	70	0	7	3	1	1	0
ND WILLISTON	34	13	50	0	24	2	.7	.6	.7	.9	450	1.3	118	89	70	0	7	2	1	1	0
OH AKRON-CANTON	51	39	76	29	45	11	1.6	.9	.6	1.6	123	4.5	74	88	65	0	2	5	2	2	0
OH CINCINNATI	52	38	75	28	45	6	.5	-	.4	.3	.6	33	3.3	42	90	56	0	3	3	0	0
OH CLEVELAND	51	40	76	30	45	12	1.1	.1	.5	1.1	85	3.0	51	80	59	0	3	4	0	0	0
OH COLUMBUS	54	39	77	28	46	10	.5	-	.3	.5	33	2.4	38	84	53	0	3	5	0	0	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending Mar. 12, 1983

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Feb. 26	PCT. NORMAL SINCE Feb. 26	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMPERATURE		PRECIPITATION	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	50	36	72	27	43	7	1.5	.8	1.0	1.5	115	3.6	58	89	59	0	4	4	1
TOLEDO	50	33	71	22	42	9	.6	.1	.3	.6	60	2.0	43	91	62	0	4	4	0
YOUNGSTOWN	49	36	75	25	42	10	1.8	1.1	1.0	1.8	138	4.1	64	90	67	0	4	6	1
OK OKLAHOMA CITY	59	35	69	25	47	1	0	.4	0	.7	100	5.2	168	72	34	0	2	0	0
TULSA	54	35	66	25	45	1	.1	.4	.1	.7	70	5.9	144	84	42	0	3	1	0
OR ASTORIA	59	48	64	39	53	9	3.6	2.0	1.2	4.1	124	26.3	130	93	71	0	0	7	4
BURNS	51	35	57	31	43	8	.4	.2	.3	1.7	243	4.2	124	85	58	0	2	5	0
MEDFORD	61	43	65	39	52	8	.5	.1	.2	.6	75	7.2	113	98	50	0	0	4	0
PENDLETON	58	45	62	40	51	9	.8	.6	.4	2.3	575	4.5	155	87	53	0	0	7	0
PORTLAND	58	46	63	41	52	7	2.8	1.9	1.2	3.4	189	17.4	151	93	67	0	0	6	2
SALEM	58	46	63	39	52	8	2.9	1.8	.8	3.5	159	19.9	146	88	65	0	0	6	2
PA ALLENTOWN	44	37	48	34	40	5	1.3	.5	.4	1.7	106	7.8	108	90	65	0	0	6	3
ERIE	51	38	77	28	45	14	1.3	.8	1.0	1.3	118	3.9	68	83	62	0	0	6	0
HARRISBURG	46	39	54	37	42	4	1.4	.7	.7	1.5	100	7.1	111	92	73	0	2	5	1
PHILADELPHIA	46	39	54	33	43	3	1.7	.9	.8	2.6	163	8.9	129	94	71	0	0	7	1
PITTSBURGH	50	38	76	28	44	9	1.1	.3	.3	1.1	73	4.0	61	91	62	0	3	5	0
SCRANTON	43	34	54	29	39	5	1.5	.9	1.0	1.7	155	4.4	86	92	78	0	2	5	1
RI PROVIDENCE	42	35	45	25	38	4	3.1	2.2	1.1	4.4	244	13.4	158	96	83	0	1	6	2
SC CHARLESTON	66	51	74	39	58	4	4.3	3.2	3.0	5.6	267	16.2	200	89	53	0	0	2	2
COLUMBIA	66	48	79	38	57	5	2.0	.9	1.9	3.2	152	11.2	129	88	46	0	0	3	1
FLORENCE	66	51	74	38	58	6	1.3	.4	1.3	2.7	150	11.4	152	88	51	0	0	2	1
SD GREENVILLE	62	46	76	38	54	5	1.5	.3	1.2	1.7	71	9.5	90	87	47	0	0	5	1
ABERDEEN	37	21	54	12	29	6	.9	.8	.8	1.8	900	2.2	169	89	64	0	6	3	1
HURON	37	21	57	7	29	4	1.0	.8	.9	1.4	350	1.5	115	94	73	0	6	3	1
RAPID CITY	49	26	71	15	37	9	T	.2	T	.4	100	.7	58	80	46	0	6	0	0
ST LOUIS	36	21	52	14	29	2	1.1	.8	1.0	1.9	317	2.7	123	93	68	0	6	2	1
TN CHATTANOOGA	56	39	77	27	48	0	.9	.4	.9	1.7	65	8.8	69	85	47	0	1	1	1
KNOXVILLE	58	41	80	29	50	2	.5	.6	.3	.6	26	5.4	47	88	52	0	1	4	0
MEMPHIS	54	39	75	30	46	-2	T	1.1	T	2.9	132	7.7	66	80	48	0	3	2	0
NASHVILLE	54	40	77	28	47	1	.1	1.1	.1	2.4	104	7.9	71	87	54	0	3	3	0
TX ABILENE	67	41	73	33	54	1	T	.2	T	.1	25	2.4	104	62	28	0	0	0	0
AMARILLO	64	33	80	29	48	5	T	.1	T	.1	33	3.1	258	75	26	0	4	1	0
AUSTIN	69	45	80	37	57	0	.4	0	.3	1.2	120	6.1	103	67	30	0	0	2	0
BEAUMONT	70	46	81	37	58	0	T	.7	T	.7	47	12.6	134	91	33	0	0	0	0
BROWNSVILLE	80	54	89	51	67	1	T	.1	T	0	0	3.7	119	94	40	0	0	0	0
CORPUS CHRISTI	76	50	87	39	63	-1	0	.3	0	.1	14	4.2	100	81	31	0	0	0	0
DEL RIO	74	48	81	42	61	1	0	.1	0	.5	167	2.2	122	67	26	0	0	0	0
EL PASO	71	42	79	32	56	4	T	.1	T	.1	50	1.0	111	66	24	0	1	0	0
FORT WORTH	63	41	70	29	52	-1	0	.5	0	.6	60	4.4	88	69	28	0	0	0	0
GALVESTON	70	51	82	43	61	1	.1	.5	.1	.4	33	7.9	120	80	43	0	0	1	0
HOUSTON	71	43	79	34	57	-2	.1	.6	.1	.6	43	6.6	79	82	28	0	0	2	0
LUBBOCK	68	35	80	30	52	5	T	.2	T	0	0	3.0	231	72	26	0	3	0	0
MIDLAND	73	44	77	37	58	6	0	.1	0	.1	33	1.6	114	61	22	0	0	0	0
SAN ANGELO	71	42	76	36	57	2	0	.2	0	.3	100	2.8	147	72	25	0	0	0	0
SAN ANTONIO	71	42	81	34	57	-2	T	.3	T	.4	57	3.4	83	67	26	0	0	1	0
VICTORIA	75	46	83	38	61	0	T	.4	T	.1	11	5.6	119	75	27	0	0	0	0
WACO	66	39	73	28	52	-3	T	.5	T	1.8	180	6.0	113	87	37	0	3	0	0
WICHITA FALLS	64	37	71	27	51	1	0	.3	0	.1	17	2.9	104	79	29	0	2	0	0
UT BLANDING	62	35	62	32	49	12	T	.2	T	.3	75	3.4	148	78	36	0	1	0	0
CEDAR CITY	61	35	65	29	48	12	T	.2	T	.2	50	2.1	124	73	32	0	1	1	0
SALT LAKE CITY	60	38	67	33	49	11	.2	.2	.1	.7	100	3.2	110	85	42	0	0	2	0
VT BURLINGTON	41	31	52	25	36	10	.8	.4	.4	.8	100	5.6	133	89	63	0	5	6	0
VA NORFOLK	56	40	68	11	48	2	.5	.3	.2	1.8	106	10.1	123	91	62	0	1	6	0
RICHMOND	57	46	68	35	51	7	.7	.1	.2	1.6	100	7.1	99	96	77	0	0	5	0
ROANOKE	52	43	66	36	48	5	1.8	1.0	.9	1.8	113	7.2	100	90	67	0	0	4	1
WA COLVILLE	52	41	58	38	46	11	1.1	.9	.4	2.1	263	7.1	165	95	79	0	0	6	0
QUILLAYUTE	54	44	56	37	49	7	6.3	3.7	2.1	6.8	128	40.8	131	99	77	0	0	6	5
SEATTLE-TACOMA	56	45	58	39	51	7	2.0	1.1	.7	2.6	144	14.1	124	97	64	0	0	6	2
SPOKANE	52	40	60	35	46	10	.6	.2	.2	1.2	171	5.3	110	97	64	0	0	5	0
WYAKIMA	59	41	62	33	50	9	.9	.8	.3	1.0	500	4.6	192	91	57	0	0	6	0
WV BECKLEY	49	38	70	26	43	6	.5	.4	.3	.5	28	2.5	30	99	71	0	3	5	0
CHARLESTON	56	42	81	30	49	7	1.4	.5	.9	1.4	78	5.3	65	79	51	0	2	5	1
HUNTINGTON	57	43	82	33	50	8	.9	0	.4	.9	50	4.2	55	86	50	0	0	5	0
WI PARKERSBURG	54	43	79	31	49	9	1.1	.2	.6	1.1	61	4.9	60	85	56	0	2	6	1
GREEN BAY	41	27	56	20	34	9	.5	.2	.2	.8	133	3.0	111	92	65	0	5	4	0
LA CROSSE	38	26	63	18	32	5	.3	.1	.2	.4	50	2.0	80	98	72	0	6	3	0
MADISON	42	26	67	15	34	7	.5	.1	.2	.6	86	3.3	118	95	61	0	5	7	0
MILWAUKEE	43	31	64	22	37	9	1.1	.7	.5	1.1	138	4.1	114	88	65	0	5	5	1
WY WAUSAU	40	26	55	15	33	11	.6	.2	.3	.8	114	2.9	97	92	67	0	5	4	0
CASPER	53	30	65	23	42	13	.4	.2	.3	.6	200	1.5	125	86	43	0	4	2	0
WY CHEYENNE	47	28	62	18	37	7	.1	.1	.1	1.4	350	1.4	117	85	46	0	5	2	0
LANDER	55	31	62	28	43	13	T	.2	T	.3	75	.9	60	75	33	0	6	1	0
SHERIDAN	58	30	70	22	44	15	.1	.1	T	.1	25	.4	25	79	34	0	5	2	0
PR SAN JUAN	89	73	94	70	81	5	1.4	.9	1.3	1.4	140	2.3	32	84	52	3	0	3	1

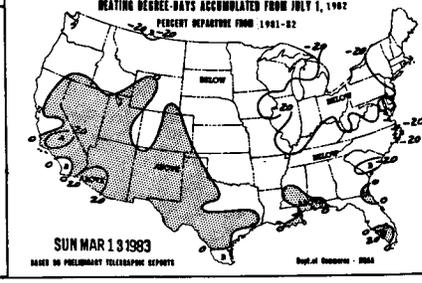
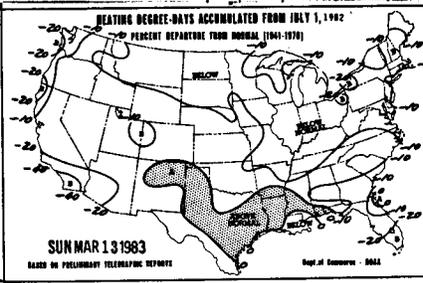
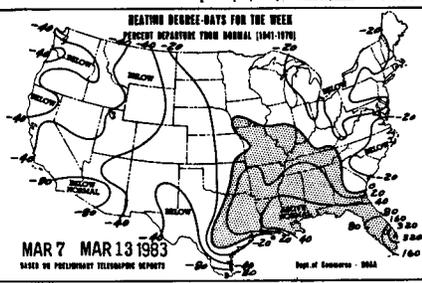
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING MAR. 13, 1983.

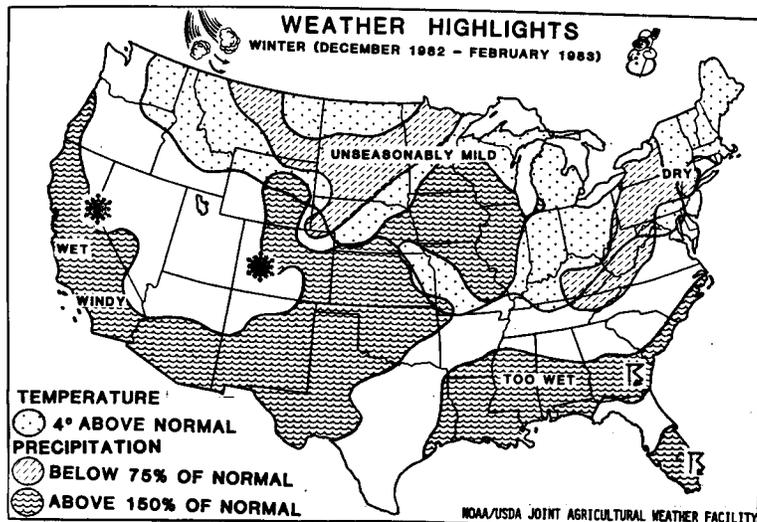
BASED ON 1941-70 NORMALS.

+ACCUMULATION FROM JULY 1, 1982

Table with 15 columns: STATES AND STATIONS, WEEKLY TOTAL, WEEKLY DEPARTURE*, SEASONAL ACCUMULATION TOTAL, SEASONAL ACCUMULATION DEPARTURE*, DEPARTURE FROM 1981-82, and similar columns for the remaining 12 stations. The table lists data for various states including ALA., ARIZ., ARK., CALIF., COLO., CONN., DEL., D.C., FLA., GA., IDAHO, ILL., IND., IOWA, KANS., KY., LA., MAINE, MD., MASS., MICH., MINN., MISS., MO., MONT., NEBR., NEV., N.H., N.J., N.MEX., N.Y., N.C., N.DAK., OHIO, OKLA., OREG., PA., R.I., S.C., S.DAK., TENN., TEXAS, UTAH, VT., VA., WASH., W.VA., WIS., and WYO.



Winter Weather Review



HIGHLIGHTS: Warmer than normal temperatures covered most of the Nation this past winter. Only Texas and parts of the gulf coast were cooler than normal. Temperatures in the Texas Panhandle were as much as 3° cooler for the season, while the northern Plains were 10-12° warmer. The warm temperatures caused winter grains in the northern Plains to lose dormancy and snow cover, making them vulnerable to late cold outbreaks. Several cold outbreaks reached into the Southeast and to northern Florida, but damage to crops was minimal. Heavy precipitation fell throughout the Mississippi Valley and the South. Frequent rain and occasional freezing rain and snow from eastern Texas eastward caused farmers to abandon some late harvesting and delayed early fieldwork. Heavy snow fell from North Carolina through New England. Snow and rain over most of the winter wheatlands of the central and southern Plains supplied abundant moisture to the soil, but alternating freeze and thaw conditions may have caused some loss due to frost heaving. Near-normal precipitation fell over most of the west coast the first month, but well-above-normal precipitation fell the last 2 months. Severe weather considerably damaged crops and delayed planting and harvesting in California. The season was drier than normal from central Tennessee northward and northeastward to southern and eastern New England. Much of the northern Plains were also drier than normal.

DECEMBER...The greatest amount of precipitation fell in the area from Lake Michigan to the mouth of the Mississippi River. The accumulation ranged from 4 inches to over 16 inches, all of which was more than twice that normally expected for December. Torrents of rain in the middle Mississippi Delta--over 16 inches--flooded large areas and delayed fieldwork. Farmers abandoned some unharvested crops. The Pacific Northwest had somewhat above-normal precipitation after a relatively dry November. Heavy snow fell in the Sierra Nevada Mountains, and above-normal precipitation accumulated over the Southwest, the central Rockies, and the High Plains

National Weather Summary (continued from front cover)

and the lower Appalachians. Light rain fell from the Piedmont of the Carolinas through the Northeast. Light rain covered Washington and Oregon, and moderate amounts with thunderstorms reached into central California.

FRIDAY ... Blustery winds bore cold air southward and eastward into Texas, the eastern Gulf Coast States, and Appalachians. Light snow fell in the Appalachians, the upper Ohio Valley, and western Pennsylvania

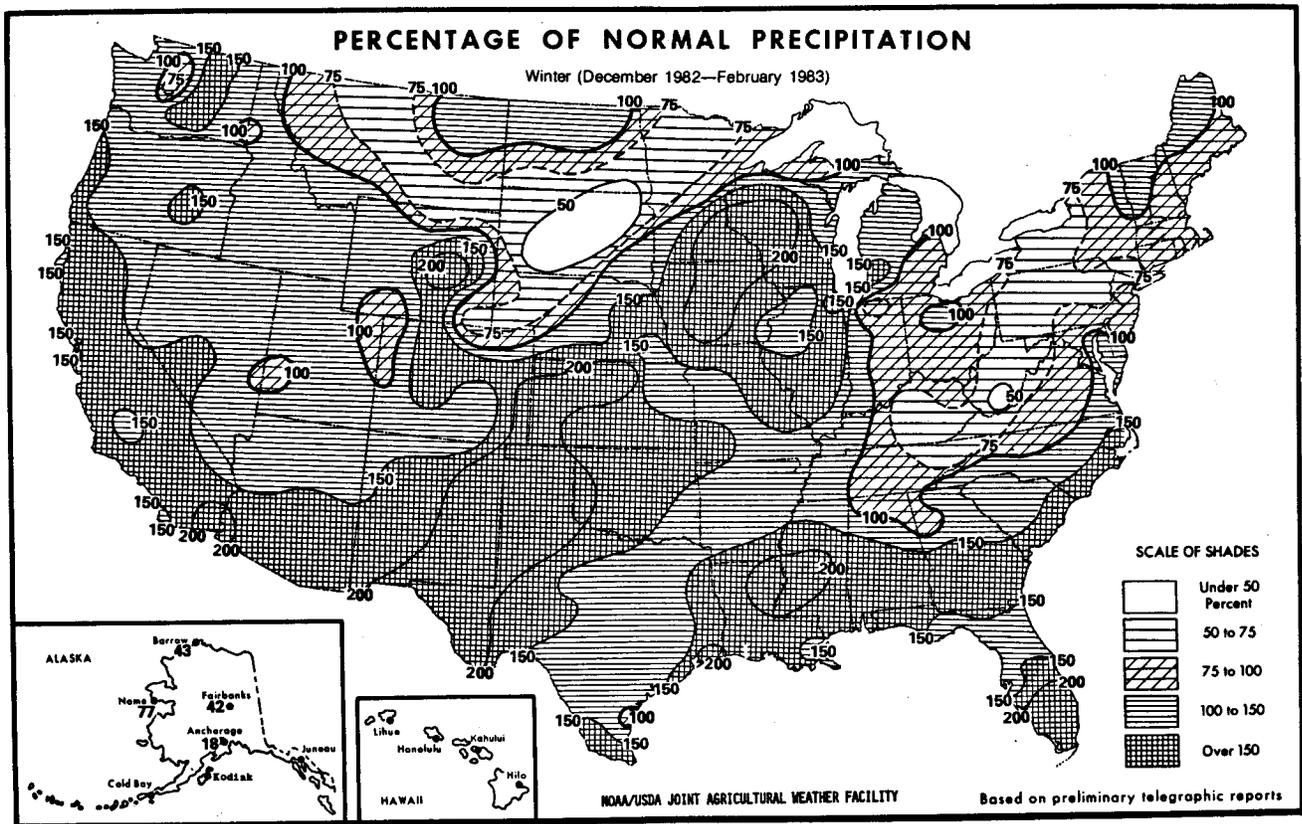
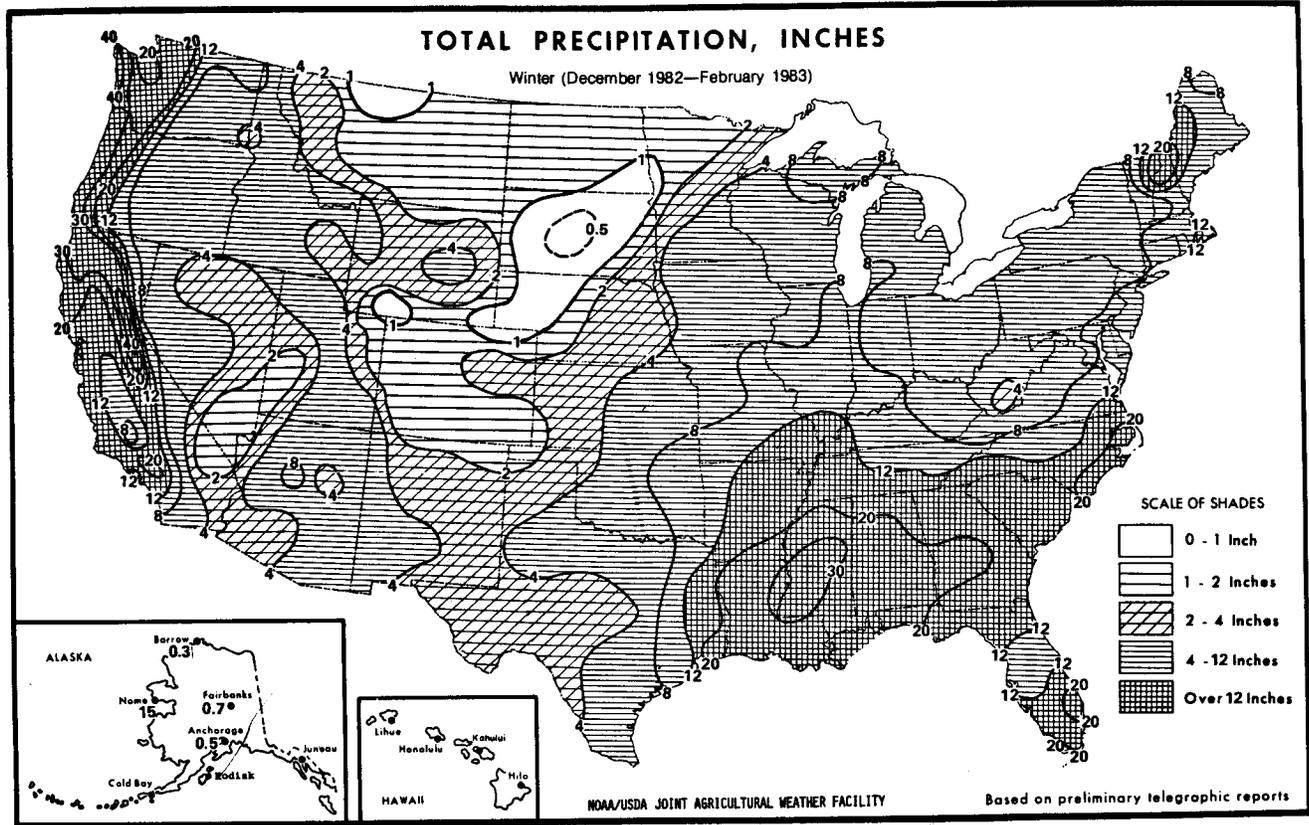
of Montana and North Dakota. Adequate precipitation covered most of the winter wheat areas of the central and southern Plains. Most of the central Plateau in the West, parts of the northern Plains, and the Northeast were drier than normal. Eastern New England, southeastern New York, northern New Jersey, and southeastern Pennsylvania had less than half the normal amount of precipitation. Average temperatures were warmer than normal east of the Rockies, but the Mountains were 2-4° cooler than normal. Most of the West averaged near normal.

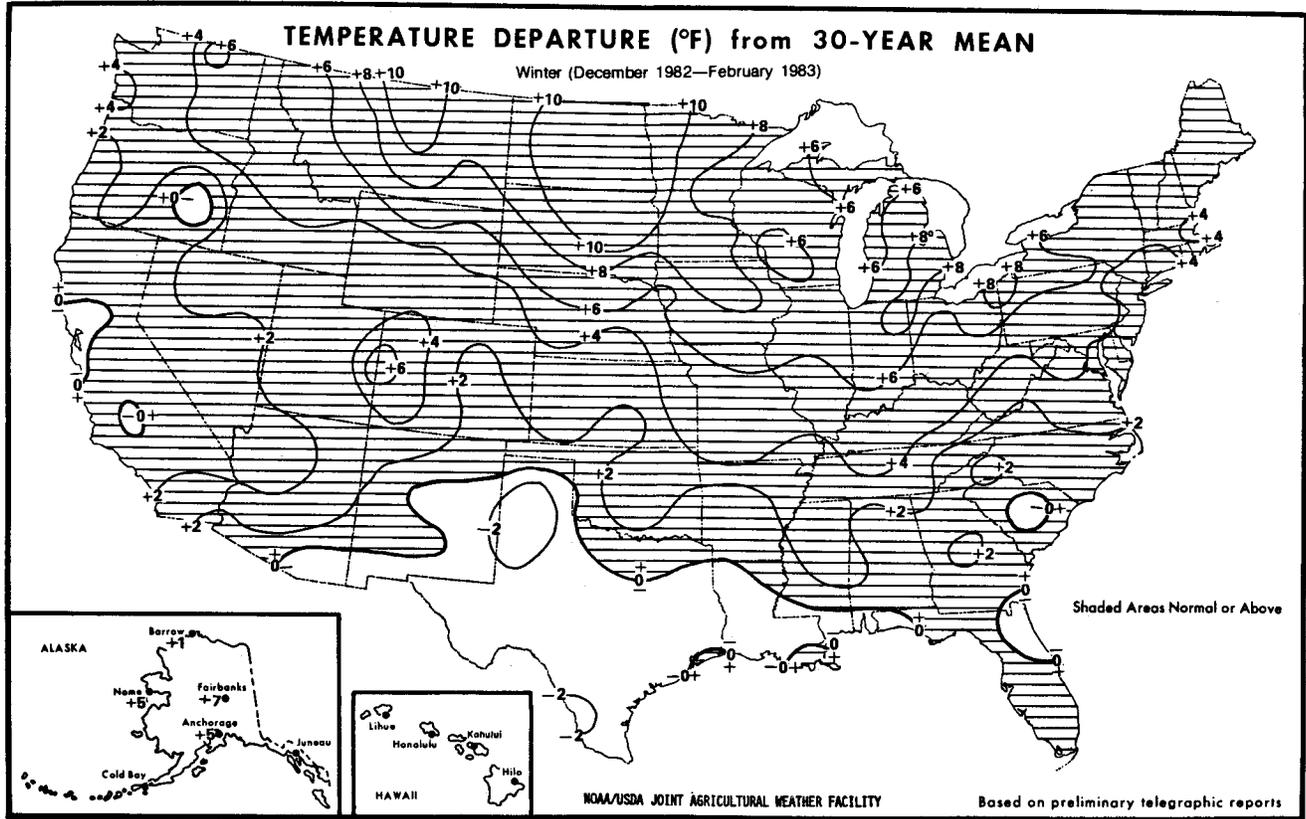
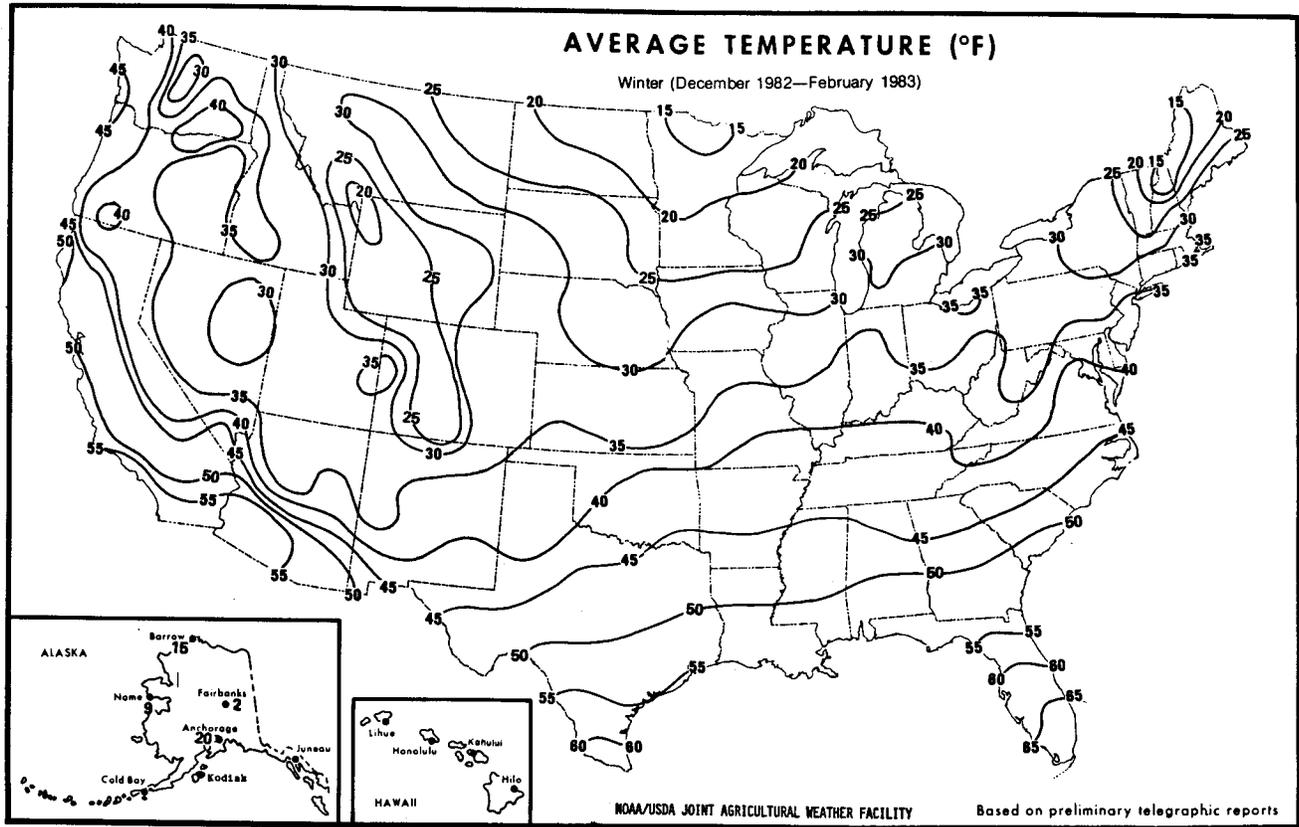
JANUARY... Snow fell in western Texas early in the month and then reached northward, covering much of the winter wheat with a protective blanket against the cold. Later, storms in the Gulf of Mexico spread heavy rain along the gulf coast. Some torrential rains covered southern Florida. The storms moved up the east coast, spreading rain and snow in the mountains of New York and New England. During the second week of the month, a snowstorm moved from the upper Mississippi Valley through the Northeast. At midmonth, a series of storms, originating from a huge low-pressure system in the Gulf of Alaska, began moving onto the west coast. The low-pressure system spawned storms almost daily, each seeming more violent than the previous one and hitting further South each time. Heavy rain, gale force winds, and high tides battered the west coast from Canada to Mexico. Snow piled high in the mountains and over the Plateau. Some of the storms regenerated in the Plains, spreading snow from central Kansas to the northern Mississippi Valley, across the Lakes, and from the central Appalachians northward. Average temperatures were warmer than normal over most of the Nation. The northern Plains again had the greatest departures from normal--ranging up to 16° above normal. The Southeast was cooler than normal.

FEBRUARY...The large low-pressure system in the Gulf of Alaska continued to spawn storms that moved onto the west coast. As the pressure deepened, the storms intensified. Gale force winds, heavy rain, thunderstorms, and even tornadoes devastated much of the west coast. Los Angeles was especially hard hit. Heavy snow covered the higher mountains through the Plateau, but warmer than normal temperatures caused rain in the lower valleys. As the storms regenerated in the Plains, snow, freezing rain, and rain fell from central New Mexico to Wisconsin. A succession of storms from the Gulf of Mexico triggered heavy thunderstorms from southern Texas across the South and up the east coast. Heavy rain again deluged southern Florida. Near midmonth, a storm deepened off North Carolina, spreading snow through the Northeast and blizzard to near-blizzard conditions from northern Virginia to southern New England. Record snow depths were measured in the latter area. Some parts of western Texas were drier than normal during the month as was an area from southern Missouri through the Ohio Valley and most of New York. Most of the Nation averaged warmer than normal, except for the South from Texas to the Atlantic and through North Carolina.

and New York. Light rain fell along the coast of the mid-Atlantic States, and some heavy rain fell through New England. Temperatures began warming in the western Plains, and warm temperatures throughout the West caused considerable snowmelt. Generally light rainshowers reached through the Northwest to central California and over the Plateau to the northern and central Rockies.

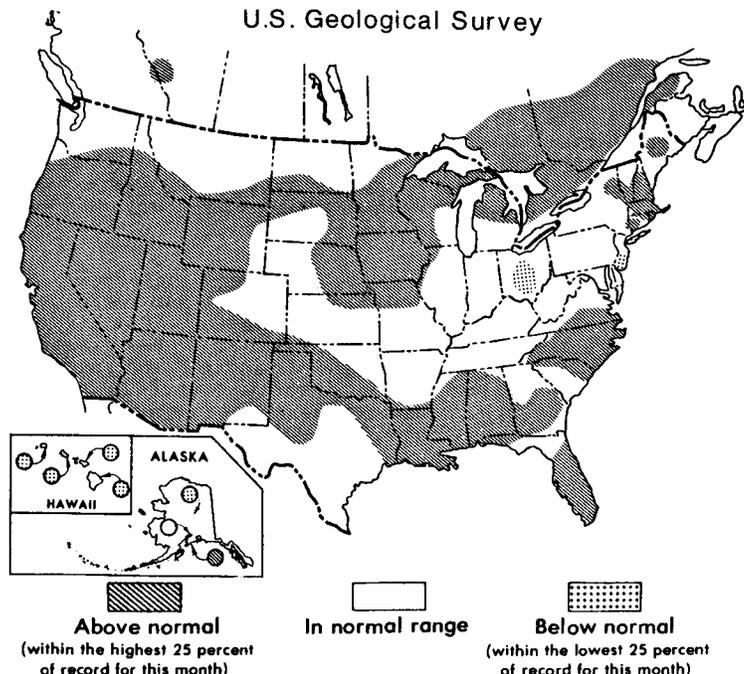
(continued on p. 19)





STREAMFLOW DURING FEBRUARY

U.S. Geological Survey



February marked a very wet month for the Nation's streams with 97 percent of the key index gaging stations across the country reporting average to above-average streamflow, according to the U.S. Geological Survey (USGS), U.S. Department of the Interior.

Only one gaging station each in New York, New Jersey, Ohio, and Alaska and all four of the key index stations in Hawaii reported below-normal conditions.

The near-drought conditions in Hawaii strongly contrasted the generally wet conditions across the continental United States. On the large Island of Hawaii, the key index gage on Waiakea Stream near Mountain View reported several days of zero flow during the month. Kilauea Volcano, located on the Island of Hawaii, has erupted several times during the past 2 months, and the lack of moisture combined with intense heat from the lava flow have increased the threat of brush fires on the island.

As an indication of the Nation's generally plentiful water picture, combined flow of the "Big Five" rivers--Mississippi, St. Lawrence, Columbia, Ohio, and Missouri--averaged 889 billion gallons a day (bgd), 11 percent above the long-term average for February. The "Big Five," together draining more than half of the conterminous United States, provide hydrologists with a convenient check on overall national water conditions.

February marks the ninth straight month that the combined flow of the "Big Five" has been above average. Near the end of February, total daily flow was running 24 percent above the long-term combined monthly average, indicating that wet conditions could extend at least into early March.

Increased streamflows in February helped to halt a developing drought threat along much of the east coast and inland to northern Alabama. All but 2 of the 31 key index gaging stations in New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, Kentucky, and Tennessee reported average to above-average streamflow during February. In contrast, during January, each of these States had reported well-below-average streamflow at one or more index stations.

Working in cooperation with Federal, State, and local officials, USGS routinely collects data on streamflow and ground-water conditions at more than 45,000 sites across the country. The highlights of February water conditions are:

*"Big Five": Mississippi River near Vicksburg, Miss., 494 bgd, 13 percent above average, but down 27 percent from January's flood volume; St. Lawrence River near Massena, N.Y., 158 bgd, 5 percent above average and 6 percent above the January average flow; Columbia River at The Dalles, Ore., 89 bgd, 33 percent above average and 8 percent above January's flow; Ohio River at Louisville, Ky., 88 bgd, 22 percent below average but up 44 percent from the January flow; and the Missouri River at Hermann, Mo., 60 bgd, 87 percent above average and 17 percent above January's flow.

Record High Flows From Coast to Coast: New record-high flows for February were established on streams from Florida to California. Flow of Fisheating Creek at Palmdale, Fla., averaged 436 million gallons a day (mgd), 24 times average. In contrast, flow of the same creek for February 1982 averaged 1.5 mgd, 92 percent below average. Flow of the Pearl River near Bogalusa, La., averaged 33.3 bgd, the highest February flow in 45 years of record. The Oconto River near Gillette, Wis., set a new February record of 437 mgd. The previous February record high on the Oconto was set in 1966. Flow of the Sacramento River at Verona, Calif., averaged 45 bgd during February, the highest February flow in 54 years of record.

Record High Flows in Minnesota: Flow of the Minnesota River near Jordan, Minn., averaged 2.4 bgd during February, the highest February flow in 49 years of record. At the same gaging station, the river established a new daily high flow of 6.8 bgd on February 27. The highest previous daily flow was 4.3 bgd, set on February 12, 1966.

Iowa Streams at Record Highs: Flow of the Des Moines River at Fort Dodge, Iowa, set a new record-high February flow of 2.6 bgd, the highest monthly flow in 51 years of record. The river also established a new high flow of 7.06 bgd on February 24. The highest previous daily flow was 6.05 bgd, set on February 28, 1948. Flow of the Cedar River at Cedar Rapids, averaged 5.7 bgd, the highest February flow in 81 years of record.

Ground Water Conditions: Ground-water conditions varied across the country. The water level in key index wells in Kentucky, Nebraska, North Dakota, and Nevada set new record highs for February. All four of the key index wells in North Carolina reported water levels that were 1-4 feet above the long-term average. Ground-water conditions in Delaware and Maryland remained well-below average, with one key index well near Fairland, Md., reporting the 29th consecutive month of below-average water levels. The water level in a key index well near El Paso, Texas, fell to 259 feet below the land surface, the lowest level reported at this well in 18 years of record.

Crop Production Highlights

(CITRUS) production forecast, at 13.5 million tons is 13 percent above last season.

ORANGE production forecast, at 222 million boxes, is 25 percent above last season, 9 percent less than 1980-81.

GRAPEFRUIT production forecast, at 60.1 million boxes, is 4 percent less than February 1, 11 percent below last season.

LEMON production, at 26.8 million boxes, is 8 percent above last season, 14 percent less than record high 1980-81 season.

WINTER POTATO production forecast at 2.23 million cwt, is down 1 percent from 1982 but 1 percent above the record low set in 1981.

SPRING POTATO planted area estimated at 80.3 thousand acres, up 2 percent from last 2 years.

National Agricultural Summary

March 7 to 13

HIGHLIGHTS: Rain and snow slowed topdressing of wheat, land preparation, and seeding of small grains from the central Plains through the Corn Belt. Frequent showers in the Southeast slowed planting progress as farmers had only 1 to 3 days suitable for fieldwork. All field activities in this region continued to lag behind schedule because of wet conditions during the spring. Soil moisture supplies were still rated adequate to surplus. Sorghum planting centered in Texas, while corn planting became more widespread across the South. Cotton planting started in Arizona and Texas. Plantbed preparation and seeding of tobacco gained momentum in most major producing areas. Temperatures returned briefly to normal levels across northern orchards, but no damage to early buds was reported. Wet fields continued to delay vegetable planting and harvesting in California and Florida. Pastures were in fair to good condition and improving with mild temperatures, but wet conditions caused producers to continue supplemental feeding. Calving and lambing continued active.

SMALL GRAINS... Winter wheat was in good to excellent condition in Kansas and fair to mostly good across the rest of the Nation. Beneficial rains fell from the northern and central Plains into the Corn Belt, slowing topdressing planting of spring grains. Wheatfields were greening as far north as Nebraska and in the lower elevations of Idaho and Montana.

Kansas fields made good growth as warm temperatures and light precipitation continued. Wheat stands were in good to excellent condition. Limited soil-borne mosaic and greenbug infestations were reported. Seeding of oats and barley was mostly ahead of normal. Warm, moist weather accelerated the growth of wheat and other small grains in Oklahoma. Growers applied topdressing. Wheatfields in Texas responded to warmer temperatures. However, south Texas and the Rio Grande Valley need more rain for good growth. Growers were spraying for greenbugs and topdressing the crop. Some localities of the Cross Timbers and Blacklands reported light insect and disease problems. Winter wheat was rated fair to mostly good. In Arizona, wheat and barley made average progress. Early-planted small grains reached the heading stage in Yuma County. Rain, snow, and cooler temperatures late in the week slowed topdressing of wheat and seeding of spring oats across the Corn Belt. Montana winter wheat was rated fair to good with light wind damage. Wet fields delayed spring seeding in the Pacific Northwest. Some wheat stands showed stress from excessive moisture.

OTHER CROPS... Corn planting was widespread across the South as fields dried. Growers in Alabama and Georgia increased planting where conditions permitted. Planting reached 9% completion in Louisiana, 4% in Mississippi, and 12% in Texas. Wet fields slowed progress in Florida and Georgia. Sorghum planting in Texas reached 11%, lagging last year's 12% and the 19% average. Planting was in full swing in the Rio Grande Valley and moved into central areas. Tobacco producers increased plantbed preparation and seeded the crop in the Southeast. Wet conditions limited transplanting in Florida. Arizona cotton farmers resumed field preparations as fields dried, except in southeastern counties where rains continued to delay seedbed preparation.

Planting activities were limited to Yuma County. California growers made some progress preparing cottonfields for seeding as fields dried. In central and south Texas, preplant cotton activities neared completion, and some planting started. Nearly 2% of the crop was planted, the same as a year ago. Florida's sugarcane cutting moved ahead slowly due to wet conditions.

FRUITS AND NUTS... Colder weather returned to northern deciduous fruit orchards, but was not severe or prolonged enough to damage most trees. Growers were applying sprays as the weather permitted. Early varieties of apples and peaches were budding several weeks ahead of schedule as far north as Michigan. Peaches were beginning to bloom across the extreme South.

Citrus groves were in excellent condition in Florida, with some blooming expected next week. Grapefruit picking was active, while early and midseason orange harvesting was nearly complete. Navel orange harvesting was active in the San Joaquin Valley of California. Plum trees began blooming as nectarines neared completion. Many peach orchards were in full bloom. Some orchards in the Sacramento Valley were submerged in water, halting all maintenance work. Muddy fields and weak market conditions in Arizona continued to cause a slow harvest of Valencia oranges, sweet oranges, tangerines, and grapefruit. Citrus groves continued in good condition. Growers were picking Valencia oranges in the Lower Rio Grande Valley of Texas. Grapefruit picking slowed.

VEGETABLES... Cooler temperatures slowed vegetable development in Florida. Wet fields delayed harvesting. Total shipments declined 6% from the previous week. All crops continued steady or declined in volume, except cucumbers, radishes, southern peas, and strawberries. Strawberry picking increased in spite of less than favorable weather conditions. Rain delayed fieldwork in north and central California. Excess moisture caused some artichoke plants to die. Decay became a problem in a few asparagus fields. Harvesting was mainly active in the desert areas as wet conditions slowed harvesting and delayed planting in most other regions. Lettuce harvesting increased near Blythe but declined in the Imperial Valley. Limited strawberry harvesting produced very few good quality berries. Tomato planting was virtually stopped across the northern half of the State. Spring lettuce planting was completed across Arizona. Spring melon seeding continued; early-seeded fields began emerging. Yuma County producers cut spring lettuce, cauliflower, and broccoli at a steady pace. Harvesting of cabbage, carrots, and spinach continued active in Texas. Spring onions made good growth in all areas, and the harvest is expected to begin soon. Onion transplanting continued in the Trans-Pecos region. High winds hurt some stands.

PASTURES AND LIVESTOCK... Plentiful soil moisture and warmer temperatures improved pastures across the South. Pastures were rated in fair to good condition in most areas, but producers continued supplemental feeding of livestock due to wet conditions. Additional moisture is needed in south Texas to sustain growth, but pastures continued to improve in most areas.

State Summaries of Weather and Agriculture

ALABAMA: Less than 0.10 in. of rain fell over the north with mostly none over the south. Temperatures warm at the beginning of the week but lows fell into the 20s and 30s over the last half. Air and soil temperatures averaged well below normal.

Fieldwork 1.4 days. Activities: Care of livestock, routine farm chores, planting of corn and some vegetables, and applying nitrogen to wheat. Pasture feed, mostly short. Stored feed, mostly adequate. Fieldwork behind schedule. Plowing 14%. Conditions: Pastures, wheat and livestock, fair to good.

ARIZONA: Mostly sunny mild weather except scattered light showers across northern half 14th. Amounts mostly around 0.10 in. Maximum temperatures upper 50's mountains, 60's intermediate elevations, 80's lower deserts. Average temperatures 3 to 8° above seasonal normals.

Excessive rainfall Statewide first week March caused continuance muddy field conditions. Unseasonably high temperatures last half week dried fields quicker, by end week normal field activities again underway most areas. As conditions favorable cotton farmers resumed pre-planting activities. Southeastern counties still having problems getting seedbeds ready because wet weather. Yuma County only area planting cotton but activities limited. With March 11 Payment-In-Kind sign-up past, remainder cotton farmers awaiting final results before getting planting underway on full scale basis. Wheat, barley plant development made mostly average progress Statewide, some below average growth Graham County. In Yuma County, earlier planted small grains heading stage, later planted fields there, Mohave County jointing stage. Wheat, barley elsewhere continued stand establishment. Irrigation continued most fields. Alfalfa haying activities picked up as fields dried out. Some rain damage occurred cut hay. Haying activities should increase substantially next two, three weeks. Growers Cochise County preparing seedbeds 1983 corn, grain sorghum crops. Safflower made average progress. Vegetable harvest slowed temporarily, back full swing by end week. Yuma County growers cutting spring lettuce, cauliflower, broccoli at steady rate. Spring lettuce also available Parker area. Movement expected begin Salt River Valley, Eloy areas mid-month. Spring lettuce planting completed Statewide. Spring melon seeding continued as conditions permitted. Cantaloup, watermelon, honeydew melon planting expected last another three, four weeks. Earlier seeded fields emerging normally. Harvest mixed vegetables progressed steady rate, little change activities. Little change field activities citrus industry. Muddy fields, weak market conditions contributed to continued harvest slowdown Valencia oranges, sweet oranges, tangerines, grapefruit. Lemons picked on limited scale. Reduction reflects additional quantities fruit to be left on tree, not utilized. Citrus groves remained good condition.

ARKANSAS: Week began and ended warmer than normal. A much colder than normal stretch at midweek caused temperatures to average below normal. Rainfall was very light. Highest normal 55°, lowest 46°. Highest mean 49°, lowest 40°. Highest temperature 79°, lowest 19°. All departures from normal ranged from -3 to -8°. Most rainfall 0.19 in., least zero.

Soil too wet for fieldwork. Winter wheat excellent, all fertilized. Pastures average to above. Cattle in good condition.

CALIFORNIA: Another wet week. A storm system swung into the north on 6th depositing more rain on the already sodden fields and swollen rivers. By 7th, showers and thunderstorms covered the

northern two-thirds of the State. Well above normal temperatures 8th and 9th were followed by light rain 10th as yet another storm system made landfall. The warmth and dryness of 11th was short lived and was followed by another major storm system on 12th with the heaviest rain of the entire week.

Warm weather stimulated small grain growth. Yellowing and die-out due excessive water still problem many fields. River seepage still problem Sacramento County. Broadleaf herbicides being applied. Sugarbeet seeding delayed coast, San Joaquin Valley. Harvest delayed San Joaquin Valley. Alfalfa weed, insect controls applied. Chopping soon southern San Joaquin Valley. Progress made preparing cotton fields for seeding. Sacramento Valley experiencing extreme weather created problems, trees submerged for extended periods, delayed dormant insecticide spraying, beehives swept away by flood waters. In San Joaquin Valley plums beginning bloom, peaches in full bloom, nectarines nearing end. Navel orange volume holding up but fewer oranges in good enough shape to export. Fieldwork delayed by rain north and central areas. Artichoke volume off 30%. Plants dying from root rot. Asparagus harvest slow Delta with slime, decay problems. Cutting asparagus full swing Desert. Broccoli, cauliflower harvest slow, wet fields. Planting still delayed. Carrot harvest increasing Desert. Celery harvest delayed South Coast, quality problems from excess moisture. Lettuce harvest increasing Blythe, decreasing Imperial Valley. Lettuce planting gap Central Coast continues. Potato planting delayed Kern District with seed rot many earlier fields. Strawberry harvest very light with very little shipping quality berries. Planting market tomatoes still behind schedule. Processing tomato planting still stopped by wet fields northern half of State. Many fields flooded. Ranges, pastures very soggy. Low grazing areas continue flooded many districts. Warm, dry weather needed strengthen grass. Supplemental feeding continues necessary some districts. Livestock being treated for foot rot due to muddy conditions.

COLORADO: Warm and dry Statewide, especially during the last part of the week. Temperatures were 6 to 12° above normal over the State, with the greatest departure occurring mostly in the southeast and in the Grand Junction area. Precipitation was confined to light showers, mainly early in the period.

FLORIDA: Locally heavy rains covered the Peninsula first of week. Widely scattered showers continued southern half of State, midweek. Temperatures averaged as much as 10° above normal first of week, dropping as much as 15° below normal weekend. Record lows reported along Atlantic Coast mornings of 12th and 13th, near freezing temperatures occurred, north at weekend. Patchy frost Interior Peninsula south to sections of northern Everglades morning of 13th. Strong winds with gusts 30 to 40 mph accompanied the return to colder temperatures after midweek with decreasing winds by the 13th. Rainfall of 2.00 to 3.00 in. common except for less than 1.00 in. along lower east coast.

Soil moisture mostly excessive but a few scattered areas have dried out. Corn planting slow due to wet conditions. Early planted corn coming up. Tobacco transplanting beginning slowly, expected to increase rapidly during next 2 weeks. Fieldwork for other crops making limited progress. Wheat fair to good condition but very susceptible to frost or freezing temperatures. Sugarcane harvest continues but progress slow. Peach trees in full bloom to petal fall stage except for late blooming varieties. Pasture condition remains generally poor to fair. Permanent pastures should

improve as spring weather sets in. Cattle mostly fair condition. Citrus grove condition excellent. Moisture adequate. New growth and bloom buds progressing. Some open bloom expected next week. Early midseason harvest almost complete. Grapefruit movement active for fresh and processed.

Rains, some locally heavy, fell during early week in vegetable areas. Temperatures much cooler after midweek with strong, gusty winds. Crop progress slowed by cooler weather. Total shipments decreased 6% from previous week. Harvest increased cucumbers, radishes, Southern peas and strawberries. Volume declined cauliflower, eggplant, okra, potatoes, and tomatoes. Supplies about steady snap beans, cabbage, carrots, celery, Chinese cabbage, sweet corn, escarole, lettuce, parsley, peppers and squash. Strawberry harvest increasing but slowed by adverse weather.

GEORGIA: Rainfall amounts were moderate to heavy averaging 1.00 to 2.00 in. north and 2.00 to 3.00 in. central and south. Most of the rain fell during the beginning of the week. Weekly temperatures averaged 6 to 8° above normal north and central and 4 to 6° above normal south. Averages ranged from low 50's northeast to mid 60's southeast. Over the 12th and 13th it was mostly sunny and mild, but windy 11th and 12th.

Soil moisture adequate north, adequate to surplus southeast, surplus central, north central and southwest. Increased field activity in areas where moisture levels permit. Corn planting underway in southwest. Tobacco plants fair to mostly good condition. Small grains in fair to mostly good condition, nitrogen topdressing progressing but behind normal. Pastures fair to mostly good condition. Cattle fair to mostly good. Hogs good condition.

HAWAII: Generally warm, dry weather prevailed over the State; however, there were some light showers. Much more rainfall needed to alleviate dry conditions major crop areas. Dry weather Hawaii Island causing poor flower and fruit set in papaya orchards and slow fruit development. Supplies seasonally light. Irrigation water restrictions some major vegetable growing areas. Crops in good condition but new plantings affected. Sugar and pineapple harvesting gaining momentum.

IDAHO: Mild wet weather continued as more Pacific storms moved through the State. Temperatures in the 60's were common across the State at midweek with some stations reaching 70°. Precipitation was heavy in the northern and western areas while the eastern part was slightly drier than normal. Moscow reported the largest departure with 0.89 in. above normal.

Fieldwork began in several additional areas of southwest as warm weather dried the soil. Fruit tree development ahead of last year. Irrigation ditches were being cleaned. Other areas of the State were too wet or snowcovered for field activities. Cattle yards sloppy in some areas. Calving and lambing continue with few problems. Feed supplies are adequate.

ILLINOIS: Temperatures averaged normal to 4° below normal. Maximums in the 60's early in the week before a cool trend developed. Precipitation was moderate ranging from 0.23 to 0.62 in. One to two in. of snow in northern and central areas on the 9th.

Soil moisture mostly adequate. Livestock and crops in good condition.

INDIANA: Rain, snow and lower temperatures slowed field activities, particularly spring tilling operations. Seeding of legumes and oats continues. Other activities: Topdressing wheat, hauling manure, repairing fences, spreading lime and fertilizer, readying equipment, seeding tobacco plant

beds, pruning orchards, caring for livestock and usual chores.

IOWA: Temperatures averaged near normal and precipitation was light, falling during the early week.

KANSAS: Precipitation averaged 0.10 in. west to 0.25 in. east. Temperatures averaged 39 to 42° east and central districts to 44 to 48° west. These were 6 to 10° above normal west, 1 to 3° above normal north central and central, slightly below normal east and south central.

Wheat condition good to excellent. Oats planted 30%, last year 15%, average 25%. Barley planted 15%, last year 10%, average 15%. Light wind damage. Light soil-borne mosaic and greenbug infestations. Fertilizer applied some areas. Favorable temperatures for lambing and calving.

KENTUCKY: Above normal temperatures during first of week and below normal readings rest of week. Heavy frost and freeze across State on 13th morning with overnight lows mostly in lower to mid 20's. Rainfall averaged from 0.10 in. west to 0.40 in. east.

Moisture received was needed. Disking and tobacco bed preparation accomplished. Below freezing temperatures should not have caused major damage to fruit crops.

LOUISIANA: No rain reported anywhere in the State. Temperatures ranged 4 to 5° below normal. High 83° and low 26°.

Soil moisture adequate to surplus. Days suitable for fieldwork 3.5. Spring plowing 18%, 23% 1982, 40% 1981. Corn planted 9%, 1% 1982, 9% average. Fair condition. Wheat headed 2%, condition fair. Topdressing active. Vegetables rated fair. A few farmers still planting Irish potatoes. Transplanting cabbage and peppers. Harvesting strawberries. Sugarcane condition fair to good. Growers offbarring and shaving cane and beginning to apply herbicides. Pastures and livestock rated fair. Supplemental feeding continues.

MARYLAND AND DELAWARE: The week was cloudy and mild with above normal temperatures and rainfall. Temperatures averaged 10 to 11° above normal in western Maryland and mostly 5 to 8° above normal elsewhere. High temperatures were mostly in the mid 60's to mid 70's. Low temperatures ranged from near 30 in western Maryland to the low 40's in other parts of Maryland and Delaware. Precipitation was above normal with rainfall in western Maryland ranging from 0.61 in. to 0.95 in. at Oakland with mostly over 1.00 in. elsewhere. The most rainfall was at Damascus with 2.69 in. Cloud cover was 100% for the full week. The 12th was cloudy and breezy with scattered showers. High temperatures were in the upper 40's and low temperatures were in the upper 30's. The 13th was the first completely sunny day in a while with warmer temperatures and highs in the upper 50's and lows in the mid 30's.

MICHIGAN: Well above normal temperatures continued across State. Average temperature departure 10° above normal. Precipitation and snowfall were well below normal in the Lower Peninsula. Moderate amounts of precipitation and snow fell over the Upper Peninsula.

MINNESOTA: Temperatures averaged near normal southwest to 7° above normal north central and northeast. Extremes 62° at Winona and Caledonia and -1° at Itasca State Park. Precipitation averaged 0.80 in. above normal northwest and west central and 0.20 in. below normal northeast and southwest. Generally 0.10 to 0.30 in. above normal elsewhere. Precipitation averaged 1.00 in. north-west and west central, 0.20 in. northeast and

southwest, 0.50 elsewhere. Greatest total was 1.42 in. at Canby. Snowfall during past week averaged from 3 to 7 in. in extreme west to less than 0.50 in. northeast. Snow depth at weeks end around 6 in. parts of northeast, otherwise generally trace to 2 in. north half, trace or more south half.

MISSISSIPPI: Temperatures 6 to 12° below normal. Strong cold front brought snow to northeast and flurries as far south as Jackson 9th and 10th. Hard freeze entire State on the 11th. Warmest was 84° on 7th and coldest was 21° on 12th. Most stations reported no rain all week.

Soil moisture adequate to excessive, mostly surplus. Fieldwork limited to 1.5 days suitable. Plowing for spring planting 13% completed, 23% last year. Corn plantings 4%, 10% last year. Winter wheat 11% jointing, condition fair to good. Hay and roughage, and feed grain supplies adequate to short and pastures and livestock condition fair.

MISSOURI: Temperatures averaged 3° below normal across the State. Widespread precipitation averaged from 0.20 in. in the northwest to nearly 1.50 in. in the Bootheel.

Cooler, wet weather stopped early fieldwork. Precipitation was beneficial to the wheat crop and was needed for pasture growth.

MONTANA: Precipitation finally came to most of State past week. Major midwest storm brushed southwest and south central areas and covered most of northeast and southeast leaving 6 to 12 in. of snow. Storm at the end of week brought 0.25 to 0.50 in. of moisture to most of central areas. Temperatures were again above normal, 10 to 15° in west, southwest and central areas, but only 5 to 8° above in northeast and southeast. Highest 74° at Roundup and Havre, lowest 6° at Wisdom.

Winter wheat fair to good and greening. Wind damage light. Topsoil moisture short except adequate northwest and eastern districts. Subsoil moisture adequate. Spring tillage starting southern areas. Calving and lambing nearly 35% done.

NEBRASKA: Precipitation very light. Temperatures 1° below normal in northeast to 9° above normal in Panhandle.

NEVADA: Mixed weather conditions prevailed throughout week. Showers predominated beginning and end, some clearing middle of period. Precipitation heaviest northern half of State -- mostly in form of rain. Heavy snow accumulations in Sierras. Temperature on mild side averaging between 5 and 15° above normal. Extremes: 70 and 22°.

Seedbed preparation slowed by frequent showers and gusty winds. Good progress calving and lambing. Cattle feeding operations hampered by muddy conditions.

NEW ENGLAND: Temperatures averaged 4 to 5° above normal over southern New England, and 10° above normal over northern areas. Precipitation fell as rain and drizzle 8th through 12th over southern New England as high as 6.00 in. in Massachusetts, northern New England States received from 1 to 5 in. of snow late in the week.

NEW JERSEY: Temperatures averaged 1° above normal. Extremes 24° at Toms River and Newton on the 14th and 67° at Cape May Court House on the 3th. Weekly rainfall averaged 1.84 in. north, 2.14 in. central and 1.86 in. south. The heaviest 24-hour total 1.67 in. at Downstown on the 7th to 8th. Soil moisture, in percent of field capacity, averaged 100% north, 100% central and 100% south. Four in. soil temperatures averaged 38° north, 43° central and 42° south.

Farmers tending to livestock and normal chores.

NEW MEXICO: Average temperatures 5 to 10° above normal. Trace rainfall north and west, dry elsewhere. Low northern mountains 14°. High southeastern, northeastern Plains 80°.

Irrigated wheat good to excellent condition. Barley and dryland wheat good. Over 50% grazing all grains. Cattle coming off. Lettuce, onions receiving irrigation Mesilla Valley. Chiles being planted. Soil moisture adequate all areas. Livestock good condition. Range fair.

NEW YORK: Wet week, 1 to 3 in. of rain and snow over most areas. Up to a foot of snow in Catskills, lesser amounts to north and west, mostly rain in Lower Hudson Valley. Temperatures from 30's in east and north to mid 40's in west.

NORTH CAROLINA: Temperatures a few degrees above normal in the mountains, 4 to 6° above normal over the rest of the State. Precipitation uniform over the State about 1.00 in.

Soil moisture: 20% adequate and 80% surplus. Days suitable for fieldwork: 1.3. Conditions: Wheat, oats, barley and rye fair to mostly good. Tobacco plant beds: 34% fair and 66% good. Irish potatoes: 12% poor, 38% fair and 50% good. Hay and roughage: 4% short, 93% adequate, and 3% surplus. Feed grains: 2% short, 88% adequate and 10% surplus. Pasture conditions: 2% poor, 46% fair, and 50% good, and 2% excellent. Major farm activities: Preparing and seeding tobacco beds, machine maintenance, seeding spring Irish potatoes, topdressing small grains, pruning apple trees and PIK program sign-up.

NORTH DAKOTA: A late winter storm brought rain, freezing rain and snow during early part of week. From 1 to 7 in. of snow across State. Strong winds limited travel. Melt precipitation for the week averaged from 0.08 in. south to 1.3 in. northwest. Largest amount was 1.71 in. east central. Temperatures were mild early then dropped below normal by midweek. Warmer air moved across the State on the 12th. District temperatures averaged 1 to 3° above normal. Extremes from -5° northwest on the 9th to 56° south central on the 12th. Cooler temperatures and additional precipitation slowed thoughts of a much earlier than normal spring. Warmer temperatures already melting snow but ground is quite wet in most areas.

OHIO: Temperatures averaged above seasonal levels. Temperature fluctuation was large. Afternoon temperatures early in period were at or near record levels. An approaching frontal system hit the Ohio Valley about midweek. Cooler air filtered in, driving morning lows to 20's, with a few readings in the teens. Precipitation widespread. Totals were wide ranging. Northeast sections averaged over 1.00 in. Most other sections averaged from 0.33 in. to 0.75 in. Some northwestern sections averaged under 0.25 in.

Weather at beginning of week allowed farm operators to plow, topdress winter wheat, fertilize corn ground, prune grape vines and fruit trees and seed vegetables. End of week lows forced farmers inside where sheep shearing, lambing, and calving and machinery preparation were major activities. Lows were apparently not severe or prolonged enough to damage apple trees or winter wheat. Damage from low temperatures has not been reported for peaches. Setting of cabbage plants is underway in southeastern counties.

OKLAHOMA: Temperatures averaged from 5° above normal Panhandle to 5° below normal southeast. No significant rainfall fell except northeast with average of 0.19 in.

Warm, moist weather accelerated growth of wheat and other small grains, particularly in west. Cool season grasses greening up because of recent warm temperatures and good soil moisture.

Some cattlemen in west lost livestock due to prussic acid poisoning.

OREGON: Another soggy week with 4.00 in. of precipitation recorded at the coast and northern Cascades; 3.00 in. reported from the Willamette Valley; amounts of 0.50 to 1.00 in. were reported eastward. Temperatures were 7° above normal west of the Cascades and from 8 to 10° above normal eastward.

Soil moisture supply adequate to mostly surplus. Fields too wet for any fieldwork. Wheat in the Willamette Valley beginning to show stress from too much water. Wheat east of the mountains in good shape; some spraying as weather permits. Spring seeding delayed; too wet. Most pruning is completed. Orchard spraying behind schedule due to rain. Above average temperatures resulting in fruit trees and insects to be 2 weeks ahead of schedule. Some cultivation in Malheur County for potato and onion fields, but generally too wet. Livestock mostly in good condition. Warm weather resulted in early pasture growth. Hay supplies short, resulting in early grazing, causing damage to excessively wet pastures.

PENNSYLVANIA: The week was warmer and wetter than normal. Average temperature was 40° or 6° above normal. Average precipitation 1.19 in. or 0.42 in. above normal. Temperatures started out much above normal but cooled off by weeks end. Extremes ranged from 77 to 14°. Precipitation was quite evenly distributed throughout the week.

PUERTO RICO: Island average rainfall 1.12 in. or 0.58 in. above normal. Highest weekly total 6.61 in. Highest 24-hour total 3.82 in. Temperatures averaged about 80 to 78° on Coasts and 75 to 69° Interior Divisions. Mean station temperatures ranged from 81.2 to 65.1°. Extremes 94 and 59°.

SOUTH CAROLINA: Temperatures much above normal at first, then colder than usual. Scattered frost inland early 12th. No significant rainfall.

Drying soils will allow most tomato and other vegetable growers to plant near usual schedules. Ridge peaches starting to bloom while freezes still a hazard. Land preparation for spring planting active as soil moisture permits. Farm chores and maintenance of machinery.

SOUTH DAKOTA: Average temperatures ranged from 3° below normal to 10° above normal. Extremes: 0 and 74°. Precipitation up to 1.79 in. in east. Generally 0.50 to 1.50 in. east, trace to 0.40 in. west. Up to 6 in. of snow in north.

TENNESSEE: A cold front moved through the State from the west on 7th, exiting 8th. A cold Canadian high pressure moved south 10th and 11th. High pressure remained over the State 12th and 13th. A large variation in temperatures occurred during the week. The week began with temperatures 20 to 25° above normal. Knoxville reported 80° for the warmest, however, by 10th the maximum readings were only in the 30's Statewide with gradual warming by the weekend. The coldest reading was 23° at Knoxville on the 13th. Precipitation occurred Statewide at various times throughout the week in the form of rain and snow, however, amounts were generally light. Highest amounts were up to 0.50 in. in the northeast with lesser amounts elsewhere.

TEXAS: Fair skies early week, cloudiness late week. Widely scattered Panhandle through Central Texas, thunderstorms Edwards Plateau late evening Cooler, drier air moved into State 9th afternoon, clearer skies. Showers, thunderstorms late in week. Average precipitation well below normal, no area receiving more than half normal, except Lower Valley. Most section less than 0.05 in.

Temperatures above normal in the western half State. Eastern half, temperatures below normal.

Land preparation full swing. Central, South Texas, pre-plant activities nearing completion, planting of corn and sorghum picked up. Rio Grande Valley, corn, sorghum planting continued, some cotton planting underway. Sorghum planting made good progress. Rio Grande Valley, planting continued. Corn planting also progressed well. Currently, planting progressed into Central Texas, Coast. Small grains continued to improve. Moisture supplies sufficient except for South Texas, Rio Grande Valley. Insect, disease problems light some greenbugs Cross-Timbers, Blacklands. Currently, wheat condition is 80% of normal compared with 75% a year ago. By week's end, 12% was rated as excellent; 52% good; 33% fair; and 3% poor. Cotton planting got underway Rio Grande Valley. Cotton planted 2%, 2% 1982, 6% average. Sorghum planted 11%, 12% 1982, 19% average. Corn planted 12%, 14% 1982, 17% average.

Commercial vegetables: Rio Grande Valley, harvest of carrots, spinach, cabbage continued. Spring onions making good growth, harvest expected soon. Harvest of citrus continued, grapefruit picking slow. San Antonio-Winter Garden area, harvest of cabbage, carrots was active. Spring onions making excellent progress. Laredo, onions making good growth, harvest expected soon. Harvest of carrots slowed. East Texas, fields continue to dry. Bedding of sweetpotatoes underway. Trans-Pecos region, onion transplanting continued, stands hurt by high winds. Early seeded onion fields making good progress, some wind damage. Peach trees continue to bud throughout the State. Most areas in full bud.

Range and livestock: Range, pasture condition continued improve. Grazing improved in most areas, pastures flourishing. Supplemental feeding continues. Cattle, other livestock good to excellent condition.

UTAH: Precipitation most of the State. Accumulations generally moderate to heavy. Temperatures about 6.5° above normal ranging from 2 to 11° above.

Turkey placements continue in progress. Few apples still in storage. Rain halted most land preparations in southern areas. Stockmen took steps to protect new lambs and calves on western ranges.

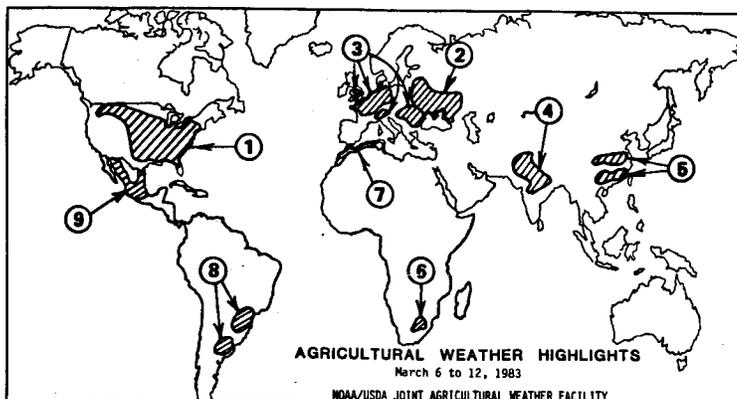
VIRGINIA: A persistent low pressure storm system kept cloudiness and widespread precipitation over the State 7th thru 11th. Temperatures were mild with many areas reporting weekly averages 10° or more above normal. Precipitation amounts ranged from 0.75 to 1.50 in. High pressure dominated the weather 12th and 13th with strong winds -- cooler temperatures and no precipitation. Some snow flurry activity occurred in western mountains 11th but there was no accumulation reported.

Very wet conditions throughout the State. These conditions held down the suitable days for fieldwork to 1.0. Topsoil moisture is rated 29% adequate and 71% surplus, with mud an annoying result. Recent warm conditions accompanied by the week's precipitation greened up many pastures and small grain fields. Topdressing of small grains has been delayed because of the rain as has overseeding of pastures. Small grains rated in excellent condition. Peach growers concerned as many orchards are starting to bud out, several weeks ahead of schedule. Calving and lambing progressed well throughout the season. Most livestock in excellent condition. Death rates have been low. Tobacco growers continue to prepare and plant seedbeds. Farmers spent much of their time inside repairing equipment and machinery, preparing taxes, record keeping, PIK signup and attending meetings.

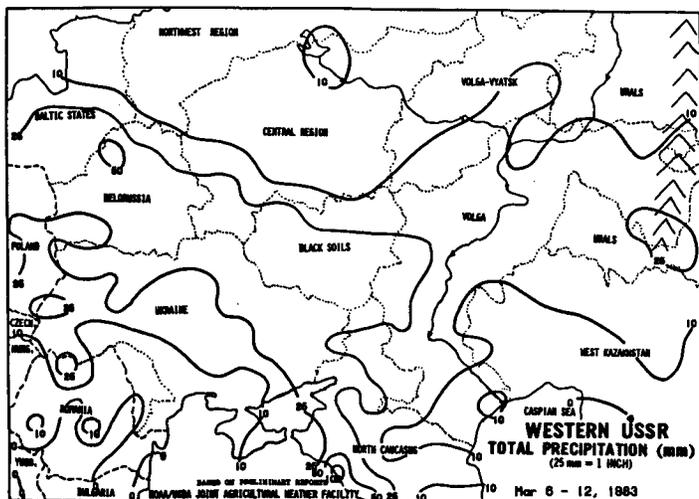
(continued on p. 19)

International Weather and Crop Summary

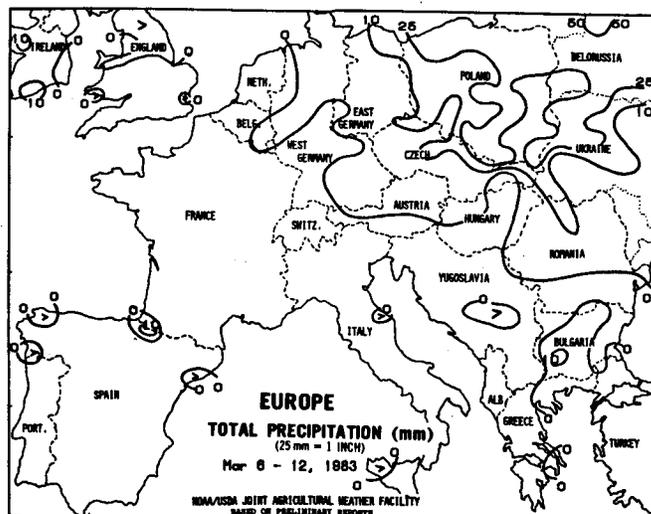
March 6 to 12



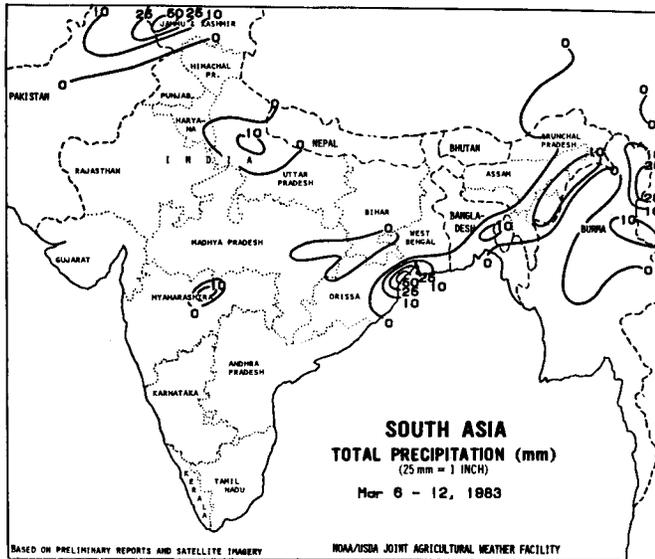
1. UNITED STATES ... Cold threatens eastern orchards, while persistent mildness advances wheat development over central and western areas. Sunny weather finally arrives over the Delta States, but most soils remain too wet for planting. Continued heavy rains over the extreme Southeast further delay fieldwork.
2. WESTERN USSR ... Generous rains benefit some winter grains. High winds possibly cause soil erosion in dry areas of the southern Ukraine.
3. EUROPE ... Dryness continues over winter grains, except those in Poland. Winter grains began early spring growth in some areas.
4. SOUTH ASIA ... General dryness benefits maturing grains and aids winter grain harvest.
5. EASTERN ASIA ... Persistent rain falls in double-crop rice areas of southeastern China as planting season begins. Dryness covers winter wheat.
6. SOUTH AFRICA ... Scattered showers come too late for corn in maturing stage, but substantial rains are needed for upcoming winter wheat planting.
7. NORTHWESTERN AFRICA ... Unfavorably dryness continues over winter grains soon to enter the heading stage.
8. SOUTH AMERICA ... Mostly dry weather favors maturing crops in Argentina. Preseason rains fall in wheat area of southern Buenos Aires. Soybean harvest progresses in Brazil with some rain delays in the south.
9. MEXICO ... Dryness and unseasonable mildness return to the Northwest, favoring planting and germination of crops. Light rain aids northeastern citrus and grain, but more is needed.



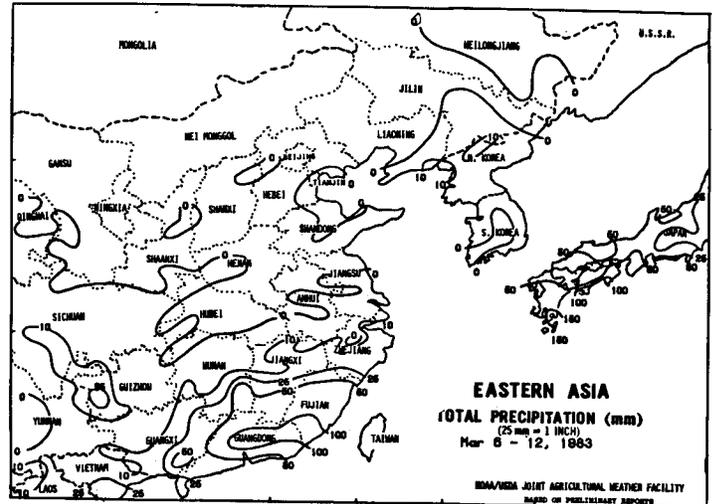
WESTERN USSR...A warming trend covered most winter grain areas. Two intense storms developed early and late in the week over the Black Soils Region, producing rain in the south and snow in the north. Heaviest amounts of precipitation, mainly rain, fell in a band stretching southeastward from the Baltic States through Belorussia, the northern half of the Ukraine, southern Black Soils, central Volga Valley, and into the western North Caucasus. In contrast, winter grain areas in the southern Ukraine received little, if any, moisture. In addition, strong, gusty winds exceeding 30 knots were reported over much of the Ukraine and North Caucasus. The winds likely caused topsoil erosion, particularly in the south where topsoils were quite dry. Average temperatures for the week were above normal in the south and below normal in the north.



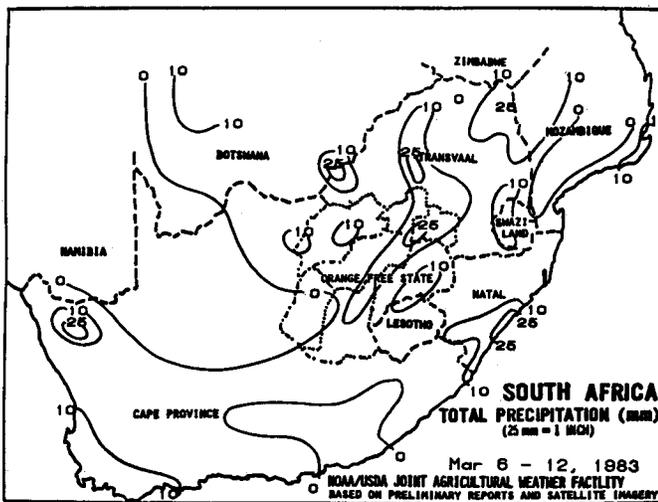
EUROPE...A high-pressure system centered over France and Spain kept most winter grain areas from receiving any precipitation. The only country to receive significant precipitation was Poland. Although the past week was dry, favorable moisture conditions exist for winter grains over most of northern and eastern Europe. In addition, warm temperatures over most of England, France, parts of northern Europe, Hungary, Yugoslavia, and Romania induced winter grains out of dormancy, with slow growth likely taking place in many areas. In Spain, chronic dryness continued to stress winter grain in the vegetative stage and may be delaying the planting of spring-sown crops in some areas.



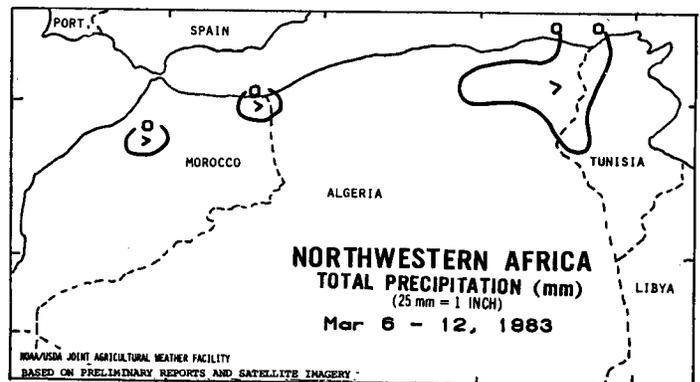
SOUTH ASIA...A generally dry weather pattern covered most of the region. The dryness benefited maturing grains in Pakistan, Punjab, Haryana, and northern Uttar Pradesh and aided the grain harvest taking place further south. Some showers fell in a band stretching northeastward from northern Orissa through southern Bangladesh into Assam, benefiting spring-harvested crops. Elsewhere, the dry weather covering Rajasthan, Gujarat, Myaharashtra, northern Karnataka, and Andhra Pradesh was seasonable for this time of year.



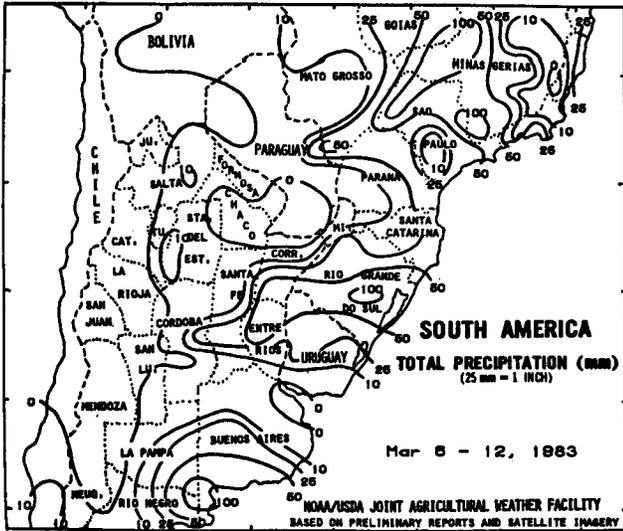
EASTERN ASIA...Showers and thunderstorms covered much of southeastern China with some locally excessive rainfall again in the double-crop rice areas of Guangdong and Fujian Provinces. Temperatures averaged somewhat below normal for the week, but any rice planting delays resulted from persistently high rainfall rather than cool weather. The rice planting season extends well into April in this area. Light rain fell south of the Yangtze River, while the winter wheat area of the North China Plain was mostly dry. The wheat crop has broken dormancy in southern growing areas and is losing winter hardiness in northern crop areas as temperatures gradually pushed above the minimum threshold level for growth as far north as Shandong and extreme southern Hebei Provinces.



SOUTH AFRICA...Scattered showers fell early in the week, mostly over eastern portions of the Maize Triangle and northern grazing areas of the Transvaal. Drier weather returned by midweek aiding late development of the severely stressed corn crop. A few light, scattered showers broke out again late in the week, but the drought persisted in the major agricultural area of the Orange Free State and the Transvaal. Substantial rains are needed soon to replenish soil moisture supplies for winter wheat planting which usually begins in April. Preplanting showers during the week benefited the southwestern portion of the Cape Province, which produces about 25 percent of the total wheat crop.



NORTHWESTERN AFRICA...Dry weather continued to cover most winter grain areas. Winter grains are approaching the moisture-sensitive heading stage, and some areas are becoming too dry for favorable yield prospects. Cumulative precipitation since early November indicates that winter grain areas of Morocco, western Algeria, and eastern Algeria are becoming too dry. In addition, above-normal temperatures this past week in Morocco increased evaporation from soils, further aggravating the low-moisture situation. In contrast, moisture supplies should be adequate for winter grains in central Algeria and Tunisia. Generous rains are needed in all areas during the next several weeks to boost yield prospects.



SOUTH AMERICA... A highly variable rainfall pattern covered the crop areas of Argentina and Brazil. Maturing crops such as corn, sorghum, sunflowers, and first-crop soybeans benefited from mostly dry weather in southern Santa Fe, Cordoba, and northern Buenos Aires. Dry weather also aided maturing cotton in Formosa and Chaco. In contrast, heavy rain fell in southern wheat areas of Argentina, providing topsoil moisture for early land preparation for upcoming wheat sowing. In Brazil, substantial rain slowed early soybean ripening and harvesting in Rio Grande do Sul; however, a major portion of the crop in the south is still filling pods. Drier weather in western Parana aided the soybean harvest, but locally heavy showers interfered with the early cotton harvest in Sao Paulo. Widespread rain also covered the citrus/coffee areas of northern Sao Paulo and Minas Gerais.



MEXICO... Sunny, mild weather over most principal agricultural areas favored fieldwork. Soils dried over the northwest, allowing harvesting of vegetables and planting of spring crops. Light rain fell over parts of the northeast, but much more is needed to alleviate dryness in rainfed citrus and row-crop districts. Warmer than usual temperatures over the northwest helped germinate recently planted cotton and other summer crops.

State Summaries (continued from p. 16)

WASHINGTON: Weather was influenced by a strong southwesterly flow aloft for almost the entire week. Numerous frontal systems passed through the Pacific Northwest, spaced about 21 to 36 hours apart. These helped to produce cloudy, mild, wet weather throughout the State. A couple of the systems went through Oregon. The return flow around the low brought significant rain east of the Cascades. Both sides of the Cascades had greater than normal temperatures and precipitation.

West: Heavy rainfall continues to limit fieldwork. Buds of caneberrries and blueberries breaking dormancy. Rhubarb harvest past peak. Commercial greenhouses rowing annual bedding plants. Cattle remain on winter feed schedule.

East: Mild and wet conditions continue to limit fieldwork and seeding of spring wheat and barley. Some root rot is showing up. A few fields of Norgold potatoes planted. Fruit growers trying to get dormant spray applied. Weed control measures suffering from frequent rains. Ranges in good condition. Calving continuing.

WEST VIRGINIA: Temperatures averaged 7° above normal across the State. High 82°, low 22°. Precipitation above normal across the State.

Soil moisture adequate to surplus. Days worked averaged 2.5. Hay supplies adequate to short. Grain and other feed supplies adequate. Unseasonably warm weather has advanced spring activities.

WISCONSIN: Light rain showers across the State with the rain changing to snow across northern, central and western sections of the State on 8th. Accumulation ranged from 4 in. in north central to 1 to 2 in. in western and central regions of the State. Occasional snow and flurries on 9th brought the State less than 2 in. of new snow. However a few places in the Lake Superior snow-belt received up to 7 in. Light snow and flurries ended 10th morning. Temperatures started out mild with a high of 62° at Mt. Mary, Racine and New London. The coldest readings of 4° was reported at Lake Thompson on early 11th.

WYOMING: Very warm temperatures. Major winter storm 12th and 13th produced significant moisture in eastern third - 0.50 to 1.50 in. Western two-thirds dry.

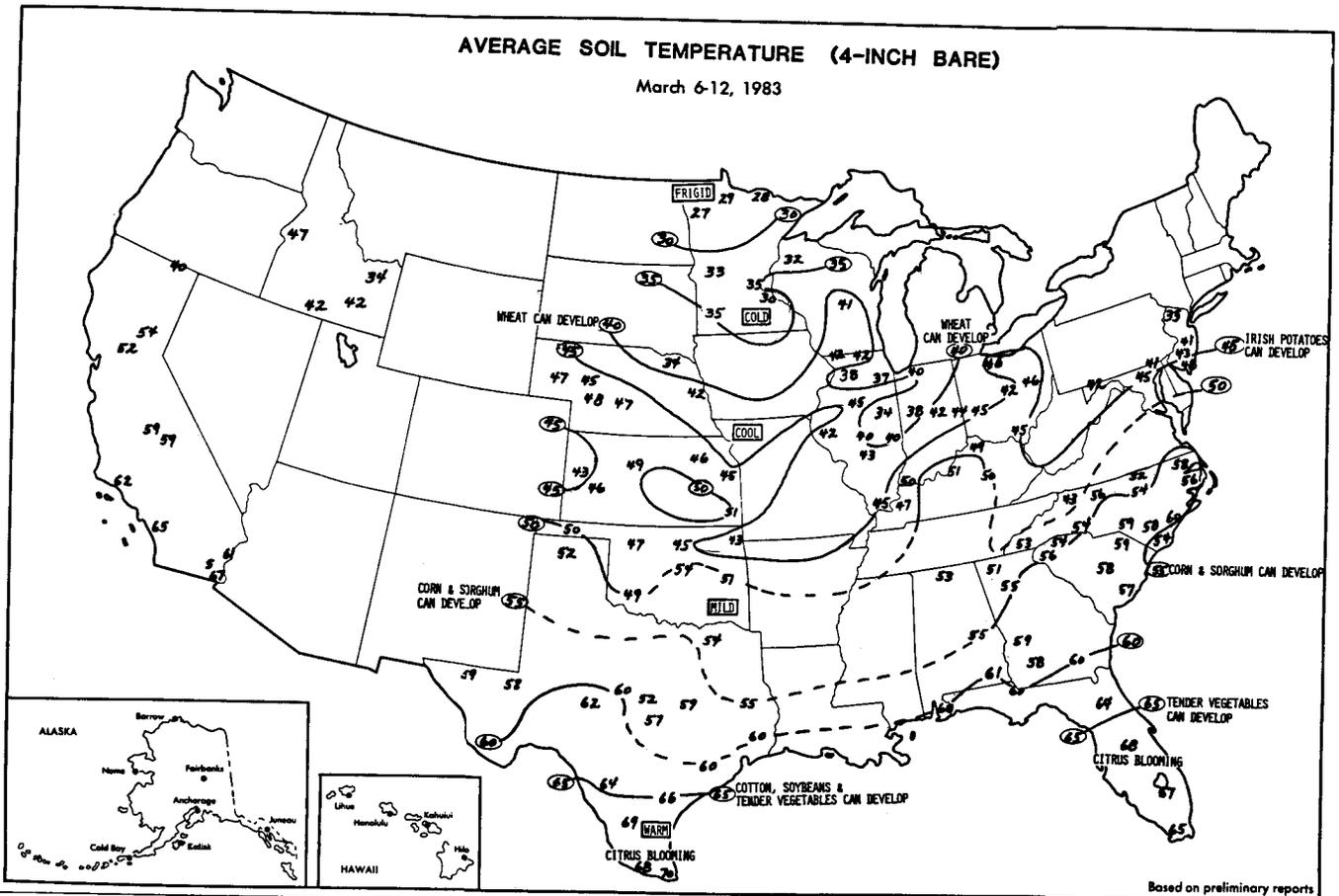
Winter wheat mostly good condition. Winter storm March 5th to 6th improved moisture conditions. Farmers preparing land for spring planting. Malt barley being planted in Big Horn Basin. Live-stock mostly good condition; lambing, calving, shearing increasing. Other activities: Fertilizing, hauling manure, disking corn.

National Weather Summary (continued from p. 8)

SATURDAY ... Heavy snow with strong winds covered New England, with rain confined to the coast. The cooler weather covered all of the East, and freezing temperatures reached to the central gulf coast. A new Pacific storm brought strong winds and heavy rain to the Pacific coast as far south as central California. Heavy snow fell in the Sierras and parts of the central Plateau, and cold rain and snow reached through the northern Rockies to North Dakota.



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